DATA PREPARATION MANUAL

for

PRE-GRANT PUBLICATION

Produced by:

United States Patent and Trademark Office
Office of Patent Publication

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Table of Contents

Section I. OVERVIEW OF DATA PREPARATION

This data preparation manual sets forth the standards necessary to produce photocomposed (Yellow Book) Pre-Grant Publication documents. It was created based on the guidelines provided by the Pre-Grant Publication Concept of Operations (PGPub ConOps). This manual is a living document. It will be reviewed and updated every six months or as needed. The publication database contractor is encouraged to provide feedback to the PGPub Division Manager on this manual. The PGPub Division Manager will present all questions and recommendations for modifications to the Data Preparation Manual Team for review.

The manual is organized as follows:

- Masthead (Section II)
- Bibliographic Columns (Section III)
- Drawings (Section IV)
- Specification and Claims (Section V)
- Sample Documents (Section VI)

Sections II-V define the following for each data element: the data source, the pre-capture verification steps, the composition instructions for the image, and examples of the composed image.

The following subsections here in Section I supplement Sections II+VI with specific references and definitions of key data preparation components.

A. Data Sources
B. Compact Disc Submissions by Applicants
C. Order of Major Elements of Composed Publications
D. Publication Processing of Secreted Protein Database Initiative (SPDI) Applications
E. Gap or Illegibility in PACR Image of Abstract, Specification, Claim, or Drawing
F. Format of Application Red Book XML DLT Tape Delivery

A. Data Sources

Required Data Sources: The data sources exported to the publication database contractor will be as follows:

- **new application filed in paper form, or corrected publication**

  - Primary BIB source (PALM)
  - Supplemental BIB source (PALM)
  - PACR/IFW images of abstract, drawing(s), specification, claim(s)

- **new application filed via EFS (Electronic Filing System)**

  - Primary BIB source (PALM)
  - Supplemental BIB source (PALM)
  - PACR/IFW images of abstract, drawing(s), specification, claim(s)

- **amended application, redacted application, application for voluntary publication, application for republication, application for early publication,applications filed by EFS (Electronic Filing System)** [*"amended" and "redacted" and "voluntary" and "republication" must be filed via EFS, while "early" may be filed via either EFS or paper*]

  - EFS bibliographic data
  - Supplemental BIB source (PALM)
  - EFS versions of abstract, drawing(s), specification, claim(s)

- **application for early publication filed in paper form** [*37 CFR 1.219 says if requester of early publication does not submit via EFS, then the early publication will be based on the application papers as filed on the filing date of the application.*]

  - Primary BIB source (PALM)
  - Supplemental BIB source (PALM)
  - PACR/IFW images of abstract, drawing(s), specification, claim(s)

Each of the above-described data sources is described below.

- **Primary BIB source**, consisting of PALM bibliographic data shown with XML tagging (that is, bibliographic data supplied by the applicant and entered by the PTO into PALM)

  NOTE: However, in ***Section III. BIBLIOGRAPHIC COLUMNS*** under **Related U.S. Applications – INID (60, 62, 63, 66)**, see the information under the heading **EXCEPTION TO "Primary BIB" AS SOURCE FOR RELATED U.S. APPLICATION DATA EXCEEDING "Primary BIB" STORAGE LIMIT**.

- **Supplemental BIB source**, consisting of PALM bibliographic data shown with XML tagging (that is, bibliographic data supplied by the PTO, such as classification data, prior publication data, etc.)

- **Electronic Filing System (EFS) source**, in USPTO standard application XML tagged format for bibliographic data, abstract, specification, and claims; TIFF image files containing drawings; and, if present, large table(s)* in text or standard tagged mark-up format.

    * Electronic Filing System (EFS) data source will provide individual large table file(s) to the publication database contractor in either ASCII (text) format or USPTO-acceptable standard table mark-up language as defined in the USPTO Patent Application Publication document type definition. At the end of September 2001, EFS will start allowing applicants to submit multiple text file(s) or tagged large table file(s) as separate attached files to each EFS submitted pre-grant publication electronic filing. Using the EFS electronically filed document associated with the table(s) electronic files, the publication database contractor will verify the matching of the table content with the correct specification document.

- **Patent Application Capture and Review (PACR) image source**, in which the images of application papers will be indexed and provided in the following order:

    - **transmittal:** Not to be used as a data source by the publication database contractor.

    - **application data sheet (ADS):** Not to be used as a data source by the publication database contractor, except as indicated in the NOTE below.

        NOTE: However, in ***Section III. BIBLIOGRAPHIC COLUMNS*** under **Related U.S. Applications – INID (60, 62, 63, 66)**, see the information under the heading **EXCEPTION TO "Primary BIB" AS SOURCE FOR RELATED U.S. APPLICATION DATA EXCEEDING "Primary BIB" STORAGE LIMIT** for information about special circumstances in which the ADS will be used as a data source.

    - **preliminary amendments:** Except in the circumstances described below under **specification**, **claims**, and **abstract**, the material indexed under preliminary amendments is not to be used as a data source by the publication database contractor.

    - **specification:** See ***Section V. SPECIFICATION AND CLAIMS***. If the image of the specification is not usable,for example, it is illegible or it is written in a language other than English,the publication database contractor will look to see if a substitute specification has been indexed under preliminary amendments. If a substitute specification is present under preliminary amendments, it will be captured. If no specification is present in any data

source, the publication database contractor will send a query to the Pre-Grant Publication Division of the Office of Patent Publication.

- **claims:** See ***Section V. SPECIFICATION AND CLAIMS***. If no claims whatsoever have been indexed under claims, the publication database contractor will look to see if claims have been indexed under preliminary amendments. If claim(s) are present under preliminary amendments and no claim(s) are present under claims, the claims under preliminary amendments will be captured. If at least one claim is present under claims, any additional claim(s) that may be present under preliminary amendments will not be captured. If no claims are present in any data source, the publication database contractor will send a query to the Pre-Grant Publication Division of the Office of Patent Publication.

- **abstract:** See ***Section III. BIBLIOGRAPHIC COLUMNS***. If there is no abstract, the publication database contractor will look to see if an abstract has been indexed under preliminary amendments. If an abstract is present under preliminary amendments, it will be captured. If no abstract is present in any data source, the publication database contractor will send a query to the Pre-Grant Publication Division of the Office of Patent Publication.

- **drawings:** See ***Section IV. DRAWINGS***; and in ***Section III. BIBLIOGRAPHIC COLUMNS*** see the information under the heading ***Representative Drawing***. If more than one drawing set is present, the publication database contractor will capture the most recently received set.

- **oath/declaration:** Not to be used as a data source by the publication database contractor.

- **miscellaneous papers:** Not to be used as a data source by the publication database contractor.

- **Sequence Listing:** If present, this will be the image of an "archival" Sequence Listing that was filed in paper form. This image is not to be used as a data source by the publication database contractor.

  NOTE: The data source for the Sequence Listing will be a copy of the "computer readable form" (CRF) that will be supplied to the publication database contractor by the PTO's Scientific and Technical Information Center (STIC). See below.

- **when PACR shows multiple versions of abstract, drawing(s), specification, claim(s)**

  BACKGROUND

  When a paper application is received in the U.S. Patent and Trademark Office (USPTO), the Office of Initial Patent Examination (OIPE) scans the

application into the Patent Application Capture and Review (PACR) image system.

endorsement showing mail date , A perpendicular endorsement will appear in the left margin or a horizontal endorsement will appear in the top margin of each scanned drawing sheet and each scanned text page (abstract, specification, claim). The endorsement will consist of the application number and the mail date.

scan date -- The contents folder of the PACR images will contain the date of PACR scanning.

"as filed" , When an application is first received in the USPTO, the entire application is scanned "as filed." For example, application No. 09/764,869 was received in the USPTO on Jan. 17, 2001, so that on each of its "as filed" PACR image pages the following endorsement will appear either perpendicularly in the left margin or horizontally across the top margin: 09764869 – 011701. Exception: When an application is extremely lengthy, it may take more than one day for it to be scanned into PACR. When this happens, the application's folders will show different scan dates but the "as filed" endorsements will show the same mail date.

"as filed follow on" , Sometimes a part of an application element (for example, a missing page from the specification) will be separately submitted and will scanned as an "as filed follow on." If the "as filed follow on" document is determined to have been received on the same date as the original application, then the left- or top-margin endorsement on each "as filed follow on" page will show the same mail date as the left- or top-margin endorsement on each "as filed" page. Otherwise, the "as filed follow on" mail date and scan date will be later than the "as filed" mail date and scan date.

"as perfected" , An application or elements thereof submitted (or resubmitted) to the USPTO to satisfy a requirement will be scanned into PACR as an "as perfected" document. For example, the specification for application No. 09/764,869 was resubmitted on Nov. 8, 2001, so that on each of its "as perfected" PACR image pages the following endorsement will appear in the left or top margin: 09764869 – 110801 .

"as perfected" versus "as filed follow on" , Normally an "as perfected" PACR file will include an application element (specification, drawings, etc.) in its entirety, while an "as filed follow on" PACR file will show a part (page, drawing, etc.) of the element.

"as filed" versus "as perfected" , In general, if PACR shows two entire versions of an application element and if the two versions show different scan dates in the contents folder, it can be assumed that the earlier scan date is "as filed" and that the later scan date is "as perfected." Exception: Sometimes the "as filed" PACR image file is lost and the application must be rescanned.

When this happens, the "as filed" scan date will be later than the "as perfected" scan date.

INSTRUCTIONS FOR PUBLICATION DATABASE CONTRACTOR

See the following sections of this manual:

Abstract – INID (57), **Data Source** (See the instructions beginning "If no abstract is indexed under abstract …" and the instructions beginning "[when] multiple abstracts are indexed under abstract … .")

Drawings, **Data Source** (See the instructions beginning "[when] multiple sets of drawings are indexed under drawings … .")

OVERVIEW OF SPECIFICATION AND CLAIMS (See under the heading **WHEN PACR SOURCE SHOWS MULTIPLE VERSIONS OF SPECIFICATION**.)

Claims, **Data Source** (See under the heading ***when multiple sets of claims are indexed under*** claims, and under the heading ***when no claims are indexed under*** claims, and under the heading ***when a set of claims is indexed under*** claims ***and a set of claims is indexed under*** specification.)

Supplemental Data Sources: As needed in given applications, the PTO will supply the following supplemental data sources to the publication database contractor:

- **copy of compact disc (CD) containing large table(s)**, to be supplied by the PTO's Office of Initial Patent Examination (OIPE) , Any such large table(s) will be captured from the CD and will be published as an appendix to the specification. This appendix, when present, will appear before any Sequence Listing and before the claims. See below under the heading **B. Compact Disc Submissions by Applicant**, and in ***Section V. SPECIFICATION AND CLAIMS*** see the information under the heading ***Incorporation by Reference of Material Submitted on Compact Disc*** and under the heading ***Appendix [Large Table(s) Filed on Compact Disc]***.

- **copy of "computer readable form" (CRF) of Sequence Listing**, to be supplied by the PTO's Scientific and Technical Information Center (STIC) , This is the sole source for the capture of the Sequence Listing. See below under the heading **B. Compact Disc Submissions by Applicant**. In ***Section V. SPECIFICATION AND CLAIMS*** see the information under the heading ***Sequence Listing – When Sequence Listing is to be Published as Part of the Patent Application Publication*** and under the heading ***Sequence Listing – When Sequence Listing is to Published at www.seqdata.uspto.gov***.

- **Memorandum of Authorization of Corrections for A9 or P9 Publication**, to be provided by the PTO's Pre-Grant Publication Division – This is the sole source for the A9 or P9 publication's identification of the locations of the corrections (for example, "See Paragraph [0009]" or "See Claim 10"). In ***Section III.***

BIBLIOGRAPHIC COLUMNS see ***PG Correction Data INID (15); Prior PG Publication Data INID (65)***, under **Data Source**, under ***(2) source for identifying the location(s) of the correction(s)***.

B. Compact Disc Submissions by Applicants

Under PTO rules, applicants may file certain parts of their applications,computer programs listings, large tables, Sequence Listings,in the form of compact discs (CDs).

- ***computer program listing***

  When the computer program listing is in excess of 300 lines, the applicant is required to submit the computer program listing in CD form. The applicant submits each "computer program listing" CD in two copies, one is placed in the physical file wrapper and the other is stored by OIPE.

  The PTO will not send a copy of the "computer program listing" CD to the publication database contractor. Any such computer program listing will not be captured and will not be published.

  NOTE: The CD procedure for computer program listings replaces the "microfiche appendix" procedure. The PTO's rules permit applicants to use the "microfiche appendix" procedure until March 1, 2001.

- ***large table(s)***

  When a table is in excess of 50 pages of text, the PTO rules give the applicant the option of submitting the table in CD form instead of paper form. The applicant submits each "large table(s)" CD in two copies, one becomes part of the physical application file and the other is stored by OIPE.

  For purposes of publication processing, a "large table" will be defined as any table filed by the applicant in CD form, regardless of the table's length.

  The PTO will send a copy of each "large table(s)" CD to the publication database contractor, who will use the "large table(s)" CD copy as a data source.

  The large table(s) appearing on the CD will be captured and will be published as an appendix to the specification. The "large table(s)" appendix will precede the Sequence Listing (if one is present) and the claims.

  In ***Section V. SPECIFICATION AND CLAIMS*** see the information under the heading ***Incorporation by Reference of Material Submitted on Compact Disc*** and under the heading ***Appendix [Large Table(s) Filed on Compact Disc]***.

Electronic Filing System (EFS) data source will include large table file(s) as part of the contents of the "Pre-Grant Publication EFS data tape" forwarded to the publication database contractor. The publication database contractor will **not** receive an EFS data source CD containing large table file(s). Using the EFS electronically filed specification document associated with the table(s) electronic files, the publication database contractor will verify the matching of the table content with the correct specification document.

- ***Sequence Listing***

When the application is subject to the PTO's Sequence Listing rules, the applicant is required to submit (1) an "archival copy" of the Sequence Listing that becomes a part of the physical application file and (2) a "computer readable form" (CRF) of the Sequence Listing that is maintained by STIC. The applicant, without regard to the size of the Sequence Listing, may submit his/her "archival" copy either in paper form or in CD form.

If the applicant submits a CD containing a Sequence Listing only, the applicant submits the CD in one copy and the CD becomes part of the physical application file. In addition, the applicant submits the CRF (CD, diskette, tape) of the Sequence Listing, which goes to STIC.

When the CD contains a Sequence Listing only, the PTO will not send a copy of the CD to the publication database contractor.

Whether the applicant submitted the "archival copy" in paper form or CD form, the PTO will provide the publication database contractor with a copy of the CRF. The copy of the CRF will serve as the sole source for the capture of the Sequence Listing.

In ***Section V. SPECIFICATION AND CLAIMS*** see the information under the heading ***Sequence Listing – When Sequence Listing is to be Published as Part of the Patent Application Publication*** and under the heading ***Sequence Listing – When Sequence Listing is to Published at www.seqdata.uspto.gov***.

- ***combination of computer program listing and/or large table(s) and/or Sequence Listing***

In a given application, a combination of a computer program listing and/or large table(s) and/or a Sequence Listing may be filed in CD form.

For example, if the CD contains not only a computer program listing but also large table(s), the applicant must submit the CD in two copies, one becomes part of the physical application file and the other is stored by OIPE. The PTO will send a copy of the CD to the publication database contractor, who will capture the large table(s) but will not capture the computer program listing. The large table(s) will be published as an appendix that precedes the claims.

For example, if the CD contains not only large table(s) but also a Sequence Listing, the applicant must submit the CD in two copies. One copy becomes part of the physical application file and the other is stored by OIPE. The CRF, which is submitted under a separate requirement and maintained by STIC, cannot contain any data other than the Sequence Listing. The PTO will send a copy of the CD to the publication database contractor, who will capture the large table(s) from the CD but will ignore the Sequence Listing that also appears on the CD. The PTO will send a copy of the CRF to the publication database contractor. This copy of the CRF will serve as the sole data source for the capture of the Sequence Listing. The large table(s) will be published as an appendix that will precede the Sequence Listing. The Sequence Listing (or the statement that the lengthy Sequence Listing is published at www.seqdata.uspto.gov) will follow the "large table(s)" appendix and will precede the claims.

Electronic Filing System (EFS) data source will provide the publication database contractor with the attached file(s) identified by applicant as containing table(s) as text or tagged mark-up. The publication database contractor will ignore the computer program listing or Sequence Listing content that may also appear on the applicant EFS submitted electronic large table file. Using the EFS electronically filed specification document associated with the table(s) electronic files, the publication database contractor will verify the matching of the table content with the correct specification document. As stated elsewhere in this manual, computer program listings will not be published and Sequence Listings for publication will be captured from the CRF copy provided by USPTO/STIC organization.

- ***incorporation-by-reference statement***

When a CD is filed, the "specification is required to contain an incorporation-by-reference of the material on the compact disc." This incorporation-by-reference must be in the form of "a separate paragraph … identifying each compact disc by the names of the files contained on each of the compact discs, their date of creation and their sizes in bytes." This "separate paragraph" must appear after any cross-reference to related applications and statement of government interest, and before the background/summary of the invention.

When an incorporation-by-reference statement appears in the specification source, the publication database contractor will capture it as-is, even though the contractor will also capture any large table(s) and/or any Sequence Listing that were submitted in CD form by the applicant.

In ***Section V. SPECIFICATION AND CLAIMS*** see the information under the heading ***Incorporation by Reference of Material Submitted on Compact Disc.***

C. Order of Major Elements of Composed Publications

- **utility PAP (Patent Application Publication) [A1 document]** *or*

republication of utility PAP [A2 document] *or*
corrected publication of utility PAP [A9 document]

The photocomposed utility application publication will consist of the following elements in this order:

(1) **front page**:

- masthead
- bibliographic data
- representative drawing [if present]

(2) **drawing page(s)** [if present]

(3) **specification/claim(s) page(s)**:

- specification text [beginning with title of invention]
- "large table(s)" appendix [if present]
- Sequence Listing [if present]
- claim(s) text

- **PPAP (Plant Patent Application Publication) [P1 document]** *or*
  republication of PPAP [P4 document] *or*
  corrected publication of PPAP [P9 document]

The photocomposed plant application publication will consist of the following elements in this order:

(1) **front page**:

- masthead
- bibliographic data
- [no representative drawing]
- specification/claim text [no title of invention at beginning of specification]

(2) **second and succeeding specification/claim page(s)** [if needed]

(3) **drawing page(s)**

D. Publication Processing of Secreted Protein Database Initiative (SPDI) Applications

As of this writing approximately two thousand (2,000) so-called Secreted Protein Database Initiative (SPDI) applications have been filed in the USPTO. There are thirteen SPDI "family" groupings. The hundreds of applications within each SPDI family are identical with respect to their drawings, abstracts, specifications, claims, and Sequence Listings.

The USPTO will provide the publication database contractor with a diskette dated 4/7/03 on which the file labeled "Interference" contains thirteen spreadsheets, one for each SPDI family, and each spreadsheet identifies that family's members by docket number (the **File No.** column) and U.S. application number (the **Application No.** column). From time to time, as additional SPDI applications are filed, the USPTO will provide the publication database contractor with information for the updating of the thirteen spreadsheets.

NOTE: The information on the SPDI spreadsheets is provided by the applicant and is annotated by examiners with current examination information (restriction elections, etc.), and so should be considered confidential.

The publication database contractor will use the above-described spreadsheets to identify applications that are members of the same SPDI family, in order to carry out the procedures described below.

export. Each SPDI application will be exported to the publication database contractor in the established manner – that is, the export will include Primary (PALM) bibliographic data, Supplemental (PALM) bibliographic data, PACR image data, plus the computer readable form (CRF) of the Sequence Listing.

capture of PALM data. In accordance with the existing procedures, the bibliographic data for each SPDI application will be captured from the Primary (PALM) bibliographic source and the Supplemental (PALM) bibliographic source.

re-use of SPDI "family" data. However, if the publication database contractor has previously captured and archived a member of the relevant SPDI family, the contractor may elect not to use as data sources the current SPDI application's PACR and CRF exports. Instead, the publication database contractor may re-use the following elements of the previously captured SPDI family member in the publication processing of the current SPDI application:

- drawings
- abstract
- specification
- claims
- Sequence Listing

E. Gap or Illegibility in PACR Image of Abstract, Specification, Claim, or Drawing

■ query procedure

When the PACR image of an abstract page, specification page, claims page, or drawing page contains a gap or an illegibility, the publication database contractor will notify the USPTO (Pre-Grant Publication Division).

- If the gap or illegibility was created during the PACR scanning process, the USPTO will provide the missing or illegible data for capture by the publication database contractor.
- If the gap or illegibility was present on the page as filed by the applicant, the USPTO will confirm that the PACR image is the best available image, and the publication database contractor will follow the procedures shown below.
- If the gap or illegibility was present within the Federal Research Statement, the USPTO will provide the missing or illegible data for capture by the publication database contractor.

■ gap or illegibility in TEXT

All legible characters will be captured, including legible characters that appear in incomplete words or incomplete numeric expressions.

The custom character described below will be used at the location of each gap or illegibility, regardless of the size or length of the gap or illegibility. For example, one custom character will be used for a continuous block (word, phrase, sentence, paragraph, page, etc.) of missing or illegible data, and one custom character will be used for a missing or illegible letter in an otherwise legible word.

In Application Yellow Book the custom character will trigger an ASCII string of flowing text that will appear as the text below, in 9-point Helvetica Bold:

[text missing or illegible when filed]

In Application Red Book the same custom character becomes an external TIFF image using the custom-character element. The “alt” attribute of the custom-character element will contain “text missing or illegible when filed” (no square brackets).

■ gap or illegibility in COMPLEX WORK UNIT

All legible data within a complex work unit (math, chemistry, and tables) will be captured.

The custom character as described below will be used to indicate a gap or illegibility.

In Application Yellow Book the custom character will trigger the symbol ⍰ that will appear at the location of each gap or illegibility, and at the end of the complex work unit the following footnote will appear in 6-point Times New Roman:

⍰ indicates text missing or illegible when filed

In Application Red Book

Math—The gap or illegibility markup will be exported to the images used by Red Book and saved within the NB file. The xml MathML data file will include the footnote, but all⍰ symbols will be converted to the ASCII question mark, since images are not currently supported in MathML. The "alt" attribute of the math CWU image element will contain "text missing or illegible when filed" (no square brackets).

Chemistry—The gap or illegibility markup will be saved within the CDX file. It will not be included within the exported mol file because the standard does not support images. The "alt" attribute of the chemistry CWU image element will contain "text missing or illegible when filed" (no square brackets).

Tables—In Red Book each custom character will become an external TIFF image using the "custom-character" element within the table cell. The "alt" attribute of the custom-character element will contain "text missing or illegible when filed" (no square brackets). The footnote is added as text appended at the end of the table.

⍰ indicates text missing or illegible when filed

■ gap or illegibility in DRAWING

The drawing will be captured so that the caption **BEST AVAILABLE IMAGE** in Helvetica Bold appears at the top center of the drawing in the same orientation (portrait or landscape) as the drawing.

In Red Book the "alt" attribute of the image element will contain:

BEST AVAILABLE IMAGE

F. Format of Application Red Book XML DLT Tape Delivery

The publication database contractor will include on each DLT Red Book deliverable an instance of the most recent manifest and open-index DTDs as supplied by the USPTO, starting with the Thursday, January 1, 2004, U.S. Patent Application Data/XML (Application Red Book). When the database contractor begins delivering Red Book ICE DLT tapes, a manifest and an open-index will be present on every Application Red Book DLT. The manifest and open-index instances will be named as follows:

YYYYMMDD-manifest.xml

YYYYMMDD-open-index.xml

where YYYYMMDD is the official date of the issue or publication. The migration to ICE application formats has a minor impact on the DLT formats specified in this document. The entities are resolved through the mathml2 DTD; the entity files are included in the DTD folder. Therefore for deliverables in ICE format, an entity folder will not be included. The appearance of U.S. Patent Application Data/XML (Application Red Book) on a Digital Linear Tape (DLT) cartridge will accommodate all published applications for a given week on a single DLT cartridge. There will be a directory and folders unzipped. Individual files within the folder will be zipped. Supplemental Data, such as Lengthy Sequence Listings, will appear in a separate supplemental folder, located as the last folder.

File Appearance (Folder delivery)

U.S. PATENT APPLICATION DATA / XML
Block Size = nnnnn bytes
Record Length = nnn bytes
Blocking factor = nn
Directory Name = YYYYMMDD
Number of Folders = n
Number of applications = nnnn
Date Created - Month d, YYYY

Tape Contents

Directory: **yyyymmdd**
Folders: **DTDS**
Files: DTDS.zip
ENTITIES
Files: ENTITIES.zip
PLANT
UTILnnnn
Individual publication .ZIP files
UTILnnnn
UTILnnnn
UTILnnnn
UTILnnnn
UTILnnnn
Directory: **yyyymmdd-SUPP**
Files: UsnnnnnnnnnnnAn-SUPP.ZIP

Section II. MASTHEAD

The masthead on each photocomposed front page will consist of four lines.

In each masthead, the bar code version of the application's publication number will be the sole item on the first line.

The country name, publication number, "plain language" kind designation, publication date, etc., will appear on the remaining three lines. However, the line on which a given item appears will vary according to the document kind (A1, A2, A9, P1, P4, and P9).

A horizontal line from margin to margin will be used to separate the masthead from the remainder of the photocomposed front page.

Bar Code Version of Application's Publication Number

Data Source

As needed. To be determined by the publication database contractor.

Composition

On the front page of each photocomposed document,utility PAP [A1 document], republication of utility PAP [A2 document], corrected publication of utility PAP [A9 document], PPAP [P1 document], republication of PPAP [P4 document], and corrected publication of PPAP [P9 document],the bar code version of the application's publication number will appear in a horizontal direction in the uppermost right-hand area of the front page, as the sole item in the first line of the masthead.

- **Bar Code Characters**

  The bar code will consist of eighteen characters:

Character 1	stop/start code
Characters 2+3	US code
Character 4	blank
Characters 5+8	four-digit year
Characters 9+15	sequential number (with leading zeros)
Characters 16+17	two-character ST.16 kind code*
Character 18	start/stop code

  * WIPO Standard ST.16 kind codes for Pre-Grant Publication:

  A1 first publication of utility application
  A2 second or subsequent publication of utility application
  A9 correction of previously published (A1 or A2) utility application
  P1 first publication of plant application
  P4 second or subsequent publication of plant application
  P9 correction of previously published (P1 or P4) plant application

- **Bar Code Type**

  Bar code type "Code 39" will be used, whereby each character is defined by a nine-character symbol consisting of five bars and four spaces. Each character is coded with three wide elements (bars and spaces) which represent "1" bits and six narrow elements (bars and spaces) which represent "0" bits.

- **Bar Code Minimum Requirements**

  To insure an optimum level of reading both with fixed scanners and with wand (hand-held) scanners, the following minimum requirements will be adhered to:

Standard density	9.5 characters per inch (or 2.54 cm)
Minimum nominal width of narrow bars and spaces	0.190 mm (or 0.0075")
Minimum nominal width of wide bars and spaces	0.427 mm (or 0.0169")
Minimum bar height	6.10 mm (or 0.24")
inter-character gap	1.52 mm (or 0.060")

Example(s)

utility PAP [A1]:

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States** (10) **Pub. No.: US 2003/0077777 A2**

(12) **Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Lessing et al. **REPUBLICATION**

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States**
(12) **Patent Application Publication**
Darkbloom et al.

(10) **Pub. No.: US 2003/0088888 A9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

PPAP [P1]:

US20030011111 P1

(19) **United States**
(12) **Plant Patent Application Publication**
Prose

(10) **Pub. No.: US 2003/0011111 P1**
(43) **Pub. Date: Feb. 20, 2003**

republication of PPAP [P4]:

US20030022222 P4

(19) **United States**
(12) **Plant Patent Application Publication**
Kinbote

(10) **Pub. No.: US 2003/0022222 P4**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States**
(12) **Plant Patent Application Publication**
Fielding et al.

(10) **Pub. No.: US 2003/0033333 P9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

Country Name – INID (19)

Data Source

The country name, **United States**, will be shown on the photocomposed front page of each utility PAP [A1 document], republication of utility PAP [A2 document], corrected publication of utility PAP [A9 document], PPAP [P1 document], republication of PPAP [P4 document], and corrected publication of PPAP [P9 document]. INID code (19) will be used with the country name.

Pre-Capture Verification

None.

Composition

Location

On each document the country name (19) **United States** will be located on the left side of the second line of the masthead:

A1	(19) **United States** is sole item on second line of masthead.
A2	(19) **United States** shares second line of masthead with (10) **Pub. No.**
A9	(19) **United States** shares second line of masthead with (10) **Pub. No.**
P1	(19) **United States** is sole item on second line of masthead.
P4	(19) **United States** shares second line of masthead with (10) **Pub. No.**
P9	(19) **United States** shares second line of masthead with (10) **Pub. No.**

Style

- INID code (19) will be shown as follows:
  - 9-point
  - Times New Roman
  - flush left
- The country name **United States** will be shown as follows:
  - 17-point on A1 documents;
    15-point on A2 and A9 documents;

14-point in P1, P4, and P9 documents

- uppercase and lowercase
- Times New Roman Bold
- follows INID code (19)

Example(s)

utility PAP [A1]:

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States** (10) **Pub. No.: US 2003/0077777 A2**

(12) **Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Lessing et al. **REPUBLICATION**

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States** (10) **Pub. No.: US 2003/0088888 A9**

(12) **Patent Application Publication** (48) **Pub. Date: Feb. 20, 2003**

Darkbloom et al. **CORRECTED PUBLICATION**

PPAP [P1]:

US20030011111 P1

(19) **United States**

(12) **Plant Patent Application Publication** (10) **Pub. No.: US 2003/0011111 P1**

Prose (43) **Pub. Date: Feb. 20, 2003**

republication of PPAP [P4]:

US20030022222 P4

(19) **United States** (10) **Pub. No.: US 2003/0022222 P4**

(12) **Plant Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Kinbote **REPUBLICATION**

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States** (10) **Pub. No.: US 2003/0033333 P9**

(12) **Plant Patent Application Publication** (48) **Pub. Date: Feb. 20, 2003**

Fielding et al. **CORRECTED PUBLICATION**

"Plain Language" Kind Designation - INID (12)

Data Source

The "plain language" kind-of-document designations for published applications will be as follows:

A1, A2, A9 documents → **Patent Application Publication**
P1, P4, P9 documents → **Plant Patent Application Publication**

INID code (12) will be used with the "plain language" kind-of-document designation.

NOTE: Each A2, A9, P4, and P9 document will have an additional "plain language" kind designation. See the information under the heading ***Supplemental "Plain Language" Kind Designation - No INID Code***.

Pre-Capture Verification

None.

Composition

Location

The "plain language" kind designation will be located on the left side of the third line of the masthead:

A1 (12) **Patent Application Publication** shares third line of masthead with (10) **Pub. No.**

A2 (12) **Patent Application Publication** shares third line of masthead with (43) **Pub. Date**.

A9 (12) **Patent Application Publication** shares third line of masthead with (48) **Pub. Date**.

P1 (12) **Plant Patent Application Publication** shares third line of masthead with (10) **Pub. No.**

P4 (12) **Plant Patent Application Publication** shares third line of masthead with (43) **Pub. Date**.

P9 (12) **Plant Patent Application Publication** shares third line of masthead with (48) **Pub. Date**.

Style

- INID code (12) will be shown as follows:
  - 9-point
  - Times New Roman
  - flush left
- The "plain language" kind designation will be shown as follows:
  - 17-point on A1 documents;
    15-point on A2 and A9 documents;
    14-point on P1, P4, and P9 documents
  - uppercase and lowercase
  - Times New Roman Bold
  - follows INID code (12)

Example(s)

utility PAP [A1]:

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States** (10) **Pub. No.: US 2003/0077777 A2**

(12) **Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Lessing et al. **REPUBLICATION**

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States**

(12) **Patent Application Publication**

Darkbloom et al.

(10) **Pub. No.: US 2003/0088888 A9**

(48) **Pub. Date: Feb. 20, 2003**

CORRECTED PUBLICATION

PPAP [P1]:

US20030011111 P1

(19) **United States**

(12) **Plant Patent Application Publication**

Prose

(10) **Pub. No.: US 2003/0011111 P1**

(43) **Pub. Date: Feb. 20, 2003**

republication of PPAP [P4]:

US20030022222 P4

(19) **United States**

(12) **Plant Patent Application Publication**

Kinbote

(10) **Pub. No.: US 2003/0022222 P4**

(43) **Pub. Date: Feb. 20, 2003**

REPUBLICATION

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States**

(12) **Plant Patent Application Publication**

Fielding et al.

(10) **Pub. No.: US 2003/0033333 P9**

(48) **Pub. Date: Feb. 20, 2003**

CORRECTED PUBLICATION

Publication Number, Including Kind Code - INID (10)

Data Source

■ Publication Number

The applications to be published on a given Thursday will be assigned sequential publication numbers,the element indicated by the letter N in the format US YYYY/NNNNNNN KC.

Before the sequential numbers are assigned, the applications to be published will be sorted as follows:

by U.S. class number
↘ by U.S. subclass number
↘ by application number

Class "Plt." will precede the numeric classes. Plant application publications (PPAPs and Corrected PPAPs) will be included in the same numeric sequence as utility application publications (PAPs and Corrected PAPs).

The **Pub No.** will appear in the masthead on the photocomposed front page. INID code (10) will be used with the publication number. The number itself will consist of the elements described below under **Composition**.

■ Kind Code

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
`<application-type>`	`<us-submission-type><us-application-resubmission>`
`----------`	`<application-reference appl-type>`
`<publication-filing-type>`	`<us-pre-grant><us-pre-grant-publication-request>`

Primary BIB source:

The application publication's two-character alphanumeric kind code (that is, kind-of-document code) will be determined by the `<application-type>` value and the `<publication-filing-type>` value. See **Kind Code Table ONE – Primary BIB Source**.

`<application-type>` → The value will be either "utility" or "plant."

<publication-filing-type> → The value will be one of the values in the leftmost column of **Kind Code Table ONE – Primary BIB Source**.

for example (Primary BIB):

```
<application-type>utility</application-type>
<publication-filing-type>new</publication-filing-type>
```

Kind Code Table ONE – Primary BIB Source

<publication-filing-type> value	"utility" kind code	"plant" kind code
new	A1	P1
new-utility *	A1	P1
corrected	A9	P9

* If the "new-utility" value appears in the Primary BIB source, the publication database contractor will take steps so that Application Red Book shows "new" as the <publication-filing-type> value.

EFS non-ICE source:

The application publication's two-character alphanumeric kind code (that is, kind-of-document code) will be determined by the <application-type> value and the <publication-filing-type> value. See **Kind Code Table TWO – EFS non-ICE Source**.

<application-type> → The value will be either "utility" or "plant."

<publication-filing-type> → The value will be one of the values in the leftmost column of **Kind Code Table TWO – EFS non-ICE Source** below.

for example (EFS non-ICE):

```
<application-type label="Application Type:]" values="utility"/>
<publication-request-block label="[Publication Request Block:]">
<request-for-early-publication label="[Request for Early
Publication:]"/>
<publication-filing-type label="[Publication Filing Type:]"
values="original-publication-amended"/>
```

Kind Code Table TWO – EFS non-ICE Source

<publication-filing-type> value	"utility" kind code	"plant" kind code
voluntary	A1	P1
original-publication-amended	A1	P1
original-publication-redacted	A1	P1
republication-amended	A2	P4
republication-redacted	A2	P4

EFS ICE 5.1 source:

The application publication's two-character alphanumeric kind code will be determined by the <us-application-resubmission> value and the <us-pre-grant-publication-request> value. See **Kind Code Table THREE – EFS ICE 5.1 Source**.

<us-application-resubmission values> ➔ The value will be either "utility" or "plant."

<us-pre-grant-publication-request values> ➔ The value will be one of the values in the leftmost column of **Kind Code Table THREE – EFS ICE 5.1 Source**.

NOTE: The <application-reference appl-type> value will not be used to determine the kind code.

for example (EFS 5.1 ICE):

```
<us-submission-type>
   <us-application-resubmission values="utility">
      <application-reference appl-type="Patent">
         <document-id>
            <country>US</country>
            <doc-number>10999999</doc-number>
         </document-id>
      </application-reference>
      <confirmation-number>2222</confirmation-number>
   </us-application-resubmission>
</us-submission-type>
<us-pre-grant>
<us-pre-grant-publication-request values="original-publication-
amended">
</us-pre-grant-publication-request>
</us-pre-grant>
```

Kind Code Table THREE – EFS ICE 5.1 Source

<us-pre-grant-publication-request> value	"utility" kind code	"plant" kind code
voluntary	A1	P1
original-publication-amended	A1	P1
original-publication-redacted	A1	P1
republication-amended	A2	P4
republication-redacted	A2	P4
early-original-publication-amended	A1	P1
early-original-publication-redacted	A1	P1

Pre-Capture Verification

- **<publication-filing-type> or <us-pre-grant-publication values> DATA**

The bibliographic data (Primary BIB, EFS non-ICE, EFS ICE 5.1) exported by the USPTO to the publication database contractor for either REPUBLICATION (A2/P4) processing or CORRECTED PUBLICATION (A9/P9) processing must show the correct "values" attribute in the <publication-filing-type> or <us-pre-grant-publication-request> element.

In a REPUBLICATION export the "values" attribute in the <publication-filing-type> or <us-pre-grant-publication-request> element should be either "republication-amended" or "republication-redacted."

In a CORRECTED PUBLICATION export the "values" attribute in the <publication-filing-type> element should be "corrected."

If the <publication-filing-type> or <us-pre-grant-publication-request> element shows no "values" attribute or shows an incorrect "values" attribute, the publication database contractor will e-mail the Pre-Grant Publication Division (PGPub Division). The PGPub Division's e-mail response will provide the correct "values" attribute, and the publication database contractor will change the <publication-filing-type> element so that it shows the correct "values" attribute.

Composition

Location

The (10) **Pub. No.:** will appear on the right side of the masthead. It will appear on the second or third line, depending upon the document kind:

A1 (10) **Pub. No.:** shares third line of masthead with (12) **Patent Application Publication**.

A2 (10) **Pub. No.:** shares second line of masthead with (19) **United States**.

A9 (10) **Pub. No.:** shares second line of masthead with (19) **United States**.

P1 (10) **Pub. No.:** shares third line of masthead with (12) **Plant Patent Application Publication**.

P4 (10) **Pub. No.:** shares second line of masthead with (19) **United States**.

P9 (10) **Pub. No.:** shares second line of masthead with (19) **United States**.

Style

- INID code (10) will be shown as follows:
  - 9-point
  - Times New Roman
  - flush left
- The words **Pub. No.:** (including the colon) will be shown as follows:
  - 12-point
  - uppercase and lowercase
  - Times New Roman Bold
  - follows INID code (10)
- The publication number itself will be shown as follows:
  - 14-point
  - uppercase and numeric
  - Times New Roman Bold
  - follows **Pub. No.:**
  - The publication number will consist of the following:
    - two-character country code **US**
    - space
    - four-digit year
    - diagonal mark

- seven-digit number (with leading zeros)
- space
- two-character kind code (**A1**, **A2**, **A9**, **P1, P4,** or **P9**)

Example(s)

utility PAP [A1]:

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States** (10) **Pub. No.: US 2003/0077777 A2**

(12) **Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Lessing et al. **REPUBLICATION**

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States** (10) **Pub. No.: US 2003/0088888 A9**

(12) **Patent Application Publication** (48) **Pub. Date: Feb. 20, 2003**

Darkbloom et al. **CORRECTED PUBLICATION**

PPAP [P1]:

US20030011111 P1

(19) **United States**

(12) **Plant Patent Application Publication** (10) **Pub. No.: US 2003/0011111 P1**

Prose (43) **Pub. Date: Feb. 20, 2003**

republication of PPAP [P4]:

US20030022222 P4

(19) **United States** (10) **Pub. No.: US 2003/0022222 P4**

(12) **Plant Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Kinbote **REPUBLICATION**

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States** (10) **Pub. No.: US 2003/0033333 P9**

(12) **Plant Patent Application Publication** (48) **Pub. Date: Feb. 20, 2003**

Fielding et al. **CORRECTED PUBLICATION**

Inventor Surname

Data Source

The inventor's surname will appear in the masthead of the composed front page. If the source shows multiple inventors, the Latin phrase **et al.** [including the period] will be captured so that it follows the first inventor's surname,for example, **Minderbinder et al.**

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
`<first-named-inventor>`	`<us-inventor sequence="1">`
`<family-name>`	`<last-name>`
`<name-suffix>`	`<suffix>`

Primary BIB source or EFS non-ICE source:

The inventor surname will be captured from the `<family-name>` data and the `<name-suffix>` data, if any, under `<first-named-inventor>`.

for example (Primary BIB):

```
<first-named-inventor>
   <name>
      <given-name>George</given -name>
      <middle-name>T.</middle-name>
      <family-name>Jones</family-name>
      <name-suffix>Jr.</name-suffix
   </name>
   *  *  *
</first-named-inventor>
```

On the composed front page, the masthead would show **Jones, Jr.** .

for example (EFS non-ICE):

```
<inventor-block label="[Inventor Block]">
   <first-named-inventor label="[First Named Inventor]">
      <name label="[Name:]">
         <name-prefix label="[Name Prefix:]">Mr.</name-prefix>
         <given-name label="[Given Name:]">Thomas</given-name>
         <family-name label="[Family Name:]">Hardy</family-name>
      </name>
      *  *  *
   </first-named-inventor>
</inventor-block>
```

On the composed front page, the masthead would show **Hardy**.

EFS ICE 5.1 source:

The inventor surname will be captured from the <last-name> data and the <suffix> data, if any, in the <us-inventor sequence="1"> block.

for example (EFS ICE 5.1):

```
<us-inventor sequence="1">
   <prefix>Dr.</prefix>
   <first-name>Victor</first-name>
   <last-name>Frankenstein</last-name>
   <suffix>IV</suffix>
   <nationality>DE</nationality>
   *  *  *
</us-inventor>
<us-inventor sequence="2"
   <prefix>Mr.</prefix>
   <first-name>Igor</first-name>
   <middle-name>D.</middle-name>
   <last-name>Assistant</last-name>
   <nationality>DE</nationality>
   *  *  *
</us-inventor>
```

On the composed front page, the masthead would show **Frankenstein IV et al.** .

Pre-Capture Verification

None.

Composition

Location

The sole or first-named inventor's surname will be shown on the left side of the fourth line of the masthead.

A1 Inventor surname shares fourth line of masthead with (43) **Pub. Date**.

A2 Inventor surname shares fourth line of masthead with **REPUBLICATION**.

A9 Inventor surname shares fourth line of masthead with **CORRECTED PUBLICATION**.

P1 Inventor surname shares fourth line of masthead with (43) **Pub. Date**.

P4 Inventor surname shares fourth line of masthead with **REPUBLICATION**.

P9 Inventor surname shares fourth line of masthead with **CORRECTED PUBLICATION**.

Style

- No INID code will appear with the surname in the masthead.
- The sole or first-named inventor's surname will be shown as follows:
  - 12-point
  - uppercase and lowercase
  - Times New Roman Bold
  - aligned with the initial **P** (in the word "Patent") under **Patent Application Publication** or with the initial **P** (in the word "Plant") under **Plant Patent Application Publication**;
- When there are multiple inventors, **et al.** [including the period] will be shown after the surname of the first-named inventor.
- Show diacritical marks and other special characters when they appear in the Primary BIB source.

Example(s)

utility PAP [A1]:

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States** (10) **Pub. No.: US 2003/0077777 A2**

(12) **Patent Application Publication** (43) **Pub. Date: Feb. 20, 2003**

Lessing et al. **REPUBLICATION**

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States**
(12) **Patent Application Publication**
Darkbloom et al.

(10) **Pub. No.: US 2003/0088888 A9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

PPAP [P1]:

US20030011111 P1

(19) **United States**
(12) **Plant Patent Application Publication**
Prose

(10) **Pub. No.: US 2003/0011111 P1**
(43) **Pub. Date: Feb. 20, 2003**

republication of PPAP [P4]:

US20030022222 P4

(19) **United States**
(12) **Plant Patent Application Publication**
Kinbote

(10) **Pub. No.: US 2003/0022222 P4**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States**
(12) **Plant Patent Application Publication**
Fielding et al.

(10) **Pub. No.: US 2003/0033333 P9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

Publication Date - INID (43) or (48)

Data Source

The publication database contractor will determine the publication date. It will be shown as the **Pub. Date** in the masthead of the photocomposed front page.

The INID code used with the **Pub. Date** will be either (43) or (48), depending upon the document kind:

INID (43)	A1, A2, P1, P4
INID (48)	A9, P9

Pre-Capture Verification

To be determined by the publication database contractor.

Composition

Location

(43) **Pub. Date:** [including the colon] or (48) **Pub. Date:** [including the colon] will be shown on the right side of the masthead. It will be shown on the third or fourth line, depending upon the document kind:

A1 (43) **Pub. Date** shares fourth line of masthead with inventor's surname.

A2 (43) **Pub. Date** shares third line of masthead with (12) **Patent Application Publication**.

A9 (48) **Pub. Date** shares third line of masthead with (12) **Patent Application Publication**.

P1 (43) **Pub. Date** shares fourth line of masthead with inventor's surname.

P4 (43) **Pub. Date** shares third line of masthead with (12) **Plant Patent Application Publication**.

P9 (48) **Pub. Date** shares third line of masthead with (12) **Plant Patent Application Publication**.

Style

- INID code (43) or (48) will be shown as follows:
  - 9-point
  - Times New Roman
  - vertically aligned with INID code (10)

- The words **Pub. Date:** (including the colon) will be shown as follows:
  - 12-point
  - uppercase and lowercase
  - Times New Roman Bold
  - follows INID code (43)
  - vertically aligned with the **P** in **Pub. No.:**

- The publication date itself will be shown as follows:
  - 14-point
  - uppercase and lowercase and numeric
  - Times New Roman Bold
  - follows **Pub. Date:**
  - flush right
  - month abbreviated as follows:

Jan.	Feb.	Mar.	Apr.	May	Jun.
Jul.	Aug.	Sep.	Oct.	Nov.	Dec.

Example(s)

utility PAP [A1]:

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States**
(12) **Patent Application Publication**
Lessing et al.

(10) **Pub. No.: US 2003/0077777 A2**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States**
(12) **Patent Application Publication**
Darkbloom et al.

(10) **Pub. No.: US 2003/0088888 A9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

PPAP [P1]:

US20030011111 P1

(19) **United States**
(12) **Plant Patent Application Publication**
Prose

(10) **Pub. No.: US 2003/0011111 P1**
(43) **Pub. Date: Feb. 20, 2003**

republication of PPAP [P4]:

US20030022222 P4

(19) **United States**
(12) **Plant Patent Application Publication**
Kinbote

(10) **Pub. No.: US 2003/0022222 P4**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States**

(12) **Plant Patent Application Publication**

Fielding et al.

(10) **Pub. No.: US 2003/0033333 P9**

(48) **Pub. Date: Feb. 20, 2003**

CORRECTED PUBLICATION

Supplemental "Plain Language" Kind Designation – No INID Code

Data Source

A supplemental "plain language" kind designation will appear in the mastheads of republications (A2 and P4 documents) and corrected publications (A9 and P9 documents). The supplemental "plain language" kind designation will be either the word **REPUBLICATION** or the words **CORRECTED PUBLICATION**, as shown below:

A2, P4 documents → **REPUBLICATION**

A9, P9 documents → **CORRECTED PUBLICATION**

No INID code will be used with the supplemental "plain language" kind designation.

Supplemental "plain language" kind designations will not appear on A1 and P1 documents.

Pre-Capture Verification

None.

Composition

Location

The supplemental "plain language" kind designation will appear on the right side of the fourth line of the masthead:

A2 **REPUBLICATION** shares fourth line of masthead with inventor surname.

A9 **CORRECTED PUBLICATION** shares fourth line of masthead with inventor surname.

P4 **REPUBLICATION** shares fourth line of masthead with inventor surname.

P9 **CORRECTED PUBLICATION** shares fourth line of masthead with inventor surname.

Supplemental "plain language" kind designations will not appear in the mastheads of A1 and P1 documents.

Style

- The word **REPUBLICATION** or the words **CORRECTED PUBLICATION** will be shown as follows:

  - 12-point
  - uppercase
  - Times New Roman Bold
  - vertically aligned with the **P** in **Pub. Date**

Example(s)

utility PAP [A1]:

republication of utility PAP [A2]:

US20030077777 A2

(19) **United States**
(12) **Patent Application Publication**
Lessing et al.

(10) **Pub. No.: US 2003/0077777 A2**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

corrected publication of utility PAP [A9]:

US20030088888 A9

(19) **United States**
(12) **Patent Application Publication**
Darkbloom et al.

(10) **Pub. No.: US 2003/0088888 A9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

PPAP [P1]:

republication of PPAP [P4]:

US20030022222 P4

(19) **United States**
(12) **Plant Patent Application Publication**
Kinbote

(10) **Pub. No.: US 2003/0022222 P4**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

corrected publication of PPAP [P9]:

US20030033333 P9

(19) **United States**
(12) **Plant Patent Application Publication**
Fielding et al.

(10) **Pub. No.: US 2003/0033333 P9**
(48) **Pub. Date: Feb. 20, 2003**
CORRECTED PUBLICATION

Section III. BIBLIOGRAPHIC COLUMNS

Title of Invention – INID (54)

Data Source

The source may show the title in uppercase or in uppercase/lowercase. However, the title will be captured in uppercase for the composed front page (see the **Composition** section below for INID codes, etc.).

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
`<title-of-invention-simple>`	`<invention-title>`

Primary BIB source or EFS non-ICE source:

The title of the invention will be captured from the `<title-of-invention-simple>` element.

for example (Primary BIB):

```
<title-of-invention-simple id="BB">Vehicle Seat</title-of-invention-simple>
```

For the composed front page, the title would show as **VEHICLE SEAT**.

for example (EFS non-ICE):

```
<title-of-invention-simple label="[Title of Invention:]"id="title-of-invention">Device for Detecting Flow of Male Bovine Waste Particles during Information Interchange</title-of-invention-simple>
```

For the composed front page, the title would show as **DEVICE FOR DETECTING FLOW OF MALE BOVINE WASTE PARTICLES DURING INFORMATION INTERCHANGE**.

EFS ICE 5.1 source:

The title of the invention will be captured from the <invention-title> field.

for example (EFS ICE 5.1):

```
<invention-title id="itl" lang="en">PHARMACEUTICAL FORMULATIONS
    CONTAINING SOLUBILIZED SALICYLIC ACID FOR TREATMENT OF
    HEADACHE</invention-title>
```

For the composed front page, the title would show as **PHARMACEUTICAL FORMULATIONS CONTAINING SOLUBILIZED SALICYLIC ACID FOR TREATMENT OF HEADACHE**.

when EFS data source highlights elements of title

If the EFS data source shows highlighting tags in the title, then the publication database contractor will capture the highlights in accordance with the following guidelines:

<b> tag

The title should be captured in bold.

If the title is already in bold, a redundant <b> tag should be ignored.

<i> tag

When the <i> tag is used for a biological name (genus alone, species alone, genus + species) in the title, the highlighted element will be captured in italics. For example, **ADHESIVE PAPER TRAP FOR** *MUSCA DOMESTICA*.

When the <i> tag is used for a variable or unknown in a chemical/mathematical expression in the title, the highlighted element will be captured in italics. For example, **PREPARATION OF PIGMENTS OF THE FORMULA** x**ZNO.ZNFE$_2$O$_4$**.

<u> tag

When the <u> tag is used in the title, it should be ignored.

<sup> tag

When the <sup> tag is used in the title, the highlighted element will be captured as a superscript. For example, **N^2-SUBSTITUTED NUCLEOTIDE ANALOGUES**.

<sub> tag

When <sub> tag is used in the title, the highlighted element will be captured as a subscript. For example, **STORAGE APPARATUS FOR H$_2$SO$_4$**.

Pre-Capture Verification

None.

Composition

Location

The title of the invention is shown as the first item in the left column of the photocomposed front page.

Style

- INID code (54) is shown as follows:
  - 9-point
  - Times New Roman
  - flush left
- The title of the invention is shown as follows:
  - 9-point
  - uppercase
  - Times New Roman Bold
- Additional instructions:
  - Multiple-line titles are shown flush left with the first line. Use no hyphenation. Use ragged right-hand margin.
  - Show special characters (Greek letters, off-line characters, etc.) when they appear in the source.

Example(s)

(54) **OPTICAL MEASURING METHOD, OPTICAL MEASURING APPARATUS, AND IMAGE FORMING APPARATUS**

(54) **OIL DRAINING DEVICE**

(54) **NUCLEIC ACIDS ENCODING RECEPTOR RECOGNITION FACTOR STAT1∀ AND STAT1∃, AND METHODS OF USE THEREOF**

(54) **STRAWBERRY PLANT NAMED 'EZ AS 123'**

Latin Name & Varietal Denomination (Plants Only) - INID (50)

Data Source

Latin name (genus and species) and varietal denomination (variety) will be captured as bibliographic items only for published plant applications , that is, PPAPs (P1 documents), republications of PPAPs (P4 documents), and corrected publications of PPAPS (P9 documents). INID code (50) will be used for this data.

If the Latin name and/or varietal denomination are present in the source, the item(s) will be captured. If the Latin name and varietal denomination are not present, neither item will be captured. That is, INID (50) data may or may not appear on a photocomposed P1, P4, or P9 document.

If the Latin name is present in the source but the varietal denomination is not, then the Latin name will be captured and no varietal denomination will be captured.

If the varietal denomination is present in the source but the Latin name is not, then the varietal denomination will be captured and no Latin name will be captured.

The Latin name will be captured so that the first letter of the genus is capitalized but so that the genus is otherwise in lowercase.

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
`<botanic-information>`	`<us-botanic-information>`
`<latin-name>`	`<us-latin-name>`
`<variety>`	`<us-variety-denomination>`

Primary BIB source or EFS non-ICE source:

The publication database contractor will capture these two bibliographic items from the `<botanic-information>` that appears on the Primary BIB source or in the EFS non-ICE source. The Latin name will be captured from the `<latin-name>` field. The varietal denomination will be captured from the `<variety>` field.

for example (Primary BIB):

```
<botanic-information>
   <latin-name>Verbena hybrida</latin-name>
   <variety>Elaine</variety>
</botanic-information>
```

If the Primary BIB source showed the preceding block of data, the composed INID (50) data would show the Latin name as ***Verbena hybrida*** and the varietal denomination as **Elaine**.

EFS ICE 5.1 source:

The publication database contractor will capture these two bibliographic items from the <us-botanic-information> that appears in the EFS ICE 5.1 source. The Latin name will be captured from the <us-latin-name> field and the varietal denomination will be captured from the <us-variety-denomination> field.

for example (EFS ICE 5.1):

```
<us-botanic-information>
   <us-latin-name>Verbena hybrida</us-latin-name>
   <us-variety-denomination>Dolores</us-variety-denomination>
</us-botanic-information>
```

If the EFS ICE 5.1 source showed the preceding data, the composed INID (50) data would show the Latin name as ***Verbena hybrida*** and the varietal denomination as **Dolores**. (See under **Composition** for INID codes, etc.)

additional instructions:

Under USPTO rules, the applicant may elect to show the Latin name and varietal denomination either in the plant specification or on an Application Data Sheet. The Latin name and varietal denomination as shown in one of those two locations will have been the USPTO's source for entering the information into PALM and subsequently into the Primary BIB source. Therefore, the publication database contractor may encounter the Latin name and varietal denomination in the PACR/IFW image source, either in the image of the plant specification or in the image of the Application Data Sheet:

- If the Latin name and varietal denomination appear on the PACR/IFW image of the plant specification or in the EFS specification of the plant application, the publication database contractor will capture the two items as part of the specification. In this see ***Section V. SPECIFICATION AND CLAIMS***, under the heading *Latin Name and Varietal Denomination*. If the Latin name and varietal denomination as shown in the specification differ from the Latin name and varietal denomination as shown in the Primary BIB source or in the EFS bibliographic source (non-ICE or ICE), the publication database contractor will not compare, correct, or harmonize the two versions.

- If the Latin name and varietal denomination appear on the PACR/IFW image of the Application Data Sheet, the two items as they appear on that document are to be ignored by the publication database contractor.

- If the Latin name and varietal denomination appear on the PACR/IFW image source, but do not appear on the Primary BIB source or EFS bibliographic source (non-ICE or ICE 5.1), no Latin name and varietal denomination will be captured bibliographically – that is, no INID (50) data will appear on the front page of the composed P1, P4, or P9 document.

Pre-Capture Verification

None. That is, the INID (50) Latin name and varietal denomination captured from the Primary BIB source will not be compared to the Latin name and varietal denomination as they may appear on the PACR image of the specification.

Composition

Location

When present on a P1, P4, or P9 document, the INID (50) data will immediately follow the title of the invention.

Style

- INID code (50) is shown as follows:
  - 9-point
  - Times New Roman
  - flush left
- The side-heading Latin Name: [including the colon] and the side-heading Varietal Denomination: [including the colon] are shown as follows:
  - 9-point
  - uppercase/lowercase
  - Times New Roman
- The Latin name itself (genus + species) is shown as follows:
  - 9-point
  - lowercase, except that the initial letter of the genus is uppercase
  - Times New Roman Bold Italics
- The varietal denomination itself is shown as follows:
  - 9-point
  - uppercase/lowercase
  - Times New Roman Bold

Example(s)

The Latin name and varietal denomination in each example are shown in context with the title of the invention:

(54) **VERBENA PLANT NAMED 'ELAINE'**

(50) Latin Name: ***Verbena hybrida***
Varietal Denomination: **Elaine**

(54) **POINSETTIA PLANT NAMED 'SCARLET O'**

(50) Latin Name: ***Euphorbia pulcherrima***
Varietal Denomination: **Scarlet O**

(54) **CARNIVOROUS PLANT**

(50) Latin Name: ***Dionaea muscipula***
Varietal Denomination: **Venus's Flytrap**

Inventor/Applicant Name(s) & Residence(s) – INID (75) or (76)

Data Source

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
<inventor-block>	----------
<first-named-inventor>	<us-inventor sequence="1">
<inventor>	<us-inventor sequence="2">
<name>	----------
<name-prefix>	<prefix>
<given-name>	<first-name>
<middle-name>	<middle-name>
<family-name>	<last-name>
<name-suffix>	<suffix>
<citizenship>	<nationality>
<address>	<us-postal-address>
<address-1>	<address-1>
<city>	<city>
<state>	<state>
<postalcode>	<postcode>
<country><country-code>	<country>
<residence>	<us-residence><us-residency>
<residence><non-US>	<us-residence><non-us-residency>
<authority-applicant>	<us-inventor-status>

Primary BIB source or EFS non-ICE source:

Name. The full name of each inventor/applicant,that is, <given-name> and <middle-name> (if any) and <family-name> and <name-suffix> (Jr., Sr., III, etc., if present),will be captured. If <name-prefix> appears in the source, that data (honorifics such as Mr., Mrs., Ms., Dr., Honorable) will **not** be captured. If the source shows an initial with a period (Raymond J. Johnson), the initial and the period will be captured (**Raymond J. Johnson**). If the source shows an initial without a period (Raymond J Johnson), the initial will be captured but no period will be captured (**Raymond J Johnson**).

Residence. The residence of each inventor/applicant will be captured from what appears under <residence> or <residence><non-us>. For each U.S. inventor, the <city> will be captured, the two-character <state> code will be captured, and the <country-code> **US** will be captured. For each non-U.S. inventor, the <city> will be captured and the two-character <country-code> will be captured. If the <residence> or <residence><non-us> data appears all in uppercase in the source, it will be captured all in uppercase.

NOTE: Any <address> data that appears in the source will not be captured. If no <residence> or <residence><non-US> data appears in the source, no residence will be captured.

Deceased or Incapacitated Inventors, Legal Representatives, <authority-applicant> Codes in Primary BIB. For each inventor/applicant, the source will be shown in an <authority-applicant> field, which will contain one of the following codes:

INV	indicates an inventor (either living or deceased)
LR	indicates the legal representative of a deceased or incapacitated inventor

When the <authority-applicant> code is LR, the phrase "legal representative" [preceded by a comma] will be captured so that it follows the full name of the legal representative. The Primary BIB data will not show the "status" (that is, "full capacity," "deceased," "legally incapacitated," etc.) of each inventor. When an inventor/applicant is shown with the <authority-applicant> code INV, his/her name and residence data will be captured but the word "deceased" and the phrase "late of" will not be captured. See **inventor data example B (Primary BIB)** below.

U.S. Branch of Service as Residence. If the applicant is a member of a branch of the U.S. military services, he or she may give his/her specific branch of service as his/her residence or may give U.S. Armed Services or the like as his/her residence. When the source shows a U.S. military <residence>, it will be captured. If the source shows the <state> as AA, AE, or AP (where AA means "the Americas excluding Canada" and AE means "Europe, the Middle East or Africa," and AP means "the Pacific"), then that two-character code will be captured as the <state>. In each such instance, US will be captured as the <country>. See **inventor data example C (Primary BIB)** below.

inventor data example A (Primary BIB):

```
<inventor-block>
   <first-named-inventor>
```

```
            <name>
               <given-name>Nathan</given-name>
               <middle-name>N.</middle-name>
               <family-name>Nordhoff</family-name>
            </name>
            <address>
               <city>Nashua</city>
               <state>NY</state>
               <country>
                  <country-code>US</country-code>
               </country>
            </address>
            <residence>
               <city>Nashua</city>
               <state>NY</state>
               <country>
                  <country-code>US</country-code>
               </country>
            </residence>
            <authority-applicant>INV</authority-applicant>
         </first-named-inventor>
         <inventor>
            <name>
               <given-name>Nancy</given-name>
               <middle-name>N.</middle-name>
               <family-name>Nordhoff</family-name>
            </name>
            <residence>
               <city>Nashua</city>
               <state>NY</state>
               <country>
                  <country-code>US</country-code>
               </country>
            </residence>
            <authority-applicant>INV</authority-applicant>
         </inventor>
         <inventor>
            <name>
               <given-name>Laurence</given-name>
               <middle-name>John</middle-name>
               <family-name>Petherington</family-name>
            </name>
            <address>
               <address-1>Beeches</address-1>
               <address-2>15 The High Street</address-2>
               <city>Nether Plye</city>
               <postalcode>XX XXXX</postalcode>
               <country>
                  <country-code>GB</country-code>
               </country>
            </address>
            <residence>
               <non-US>
                  <city>Nether Plye</city>
                  <country>
```

```
                    <country-code>GB</country-code>
                    </country>
            </non-US>
        </residence>
        <authority-applicant>INV</authority-applicant>
    </inventor>
</inventor-block>
```

If the Primary BIB source showed the preceding <inventor-block> data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Nathan N. Nordhoff, Nashua, NY (US);
Nancy N. Nordhoff, Nashua, NY (US);
Laurence John Petherington, Nether Plye (GB)

inventor data example B (Primary BIB):

```
<inventor-block>
    <first-named-inventor>
        <name>
            <given-name>Paul</given-name>
            <middle-name>P.</middle-name>
            <family-name>Petersen</family-name>
        </name>
        <residence>
            <city>Pittston</city>
            <state>NC</state>
            <country>
                <country-code>US</country-code>
            </country>
        </residence>
        <authority-applicant>INV</authority-applicant>
    </first-named-inventor>
    <inventor>
        <name>
            <given-name>Paul</given-name>
            <middle-name>P.</middle-name>
            <family-name>Petersen</family-name>
            <name-suffix>Jr.<name-suffix>
        </name>
        <residence>
            <city>Pittston</city>
            <state>NC</state>
            <country>
                <country-code>US</country-code>
            </country>
        </residence>
        <authority-applicant>LR</authority-applicant>
    </inventor>
</inventor-block>
```

If the Primary BIB showed the preceding <inventor-block> data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Paul P. Petersen, Pittston, NC (US);
Paul P. Peterson, Jr., legal representative,
Pittston, NC (US)

inventor data example C (Primary BIB):

```
<inventor-block>
   <first-named-inventor>
      <name>
         <given-name>Francis</given-name>
         <middle-name>M.</middle-name>
         <family-name>Marion</family-name>
      </name>
      <residence>
         <military-service>U.S. Army</military-service>
         <state>AE</state>
         <country>US</country>
      </residence>
      <authority-applicant>INV</authority-applicant>
   </first-named-inventor>
</inventor-block>
```

If the Primary BIB source showed the preceding <inventor-block> data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Francis M. Marion, U.S. Army, AE (US)

inventor data example D (EFS non-ICE):

```
<inventor-block label="[Inventor Block]">
   <first-named-inventor label="[First Named Inventor:]"
      <name label="[Name:]">
         <name-prefix label="[Name Prefix:]"></name-prefix>
         <given-name label="[Given Name:]">Vivian</given-name>
         <family-name label="[Family Name:]">Darkbloom</family-name>
      </name>
      <address label="[Address:]">
         <address-1 label="[Address:]">P.O. Box 321</address-1>
         <city label="[City:]">Ramsdale</city>
         <state label="[State or Province:]">NH</state>
         <postalcode label="[Postal Code:]">99999-9999</postalcode>
         <country label="[Country :]">
            <country-code label="[Country Code:]">US</country-code>
         </country>
      </address>
      <residence label="[Residence:]">
         <non-us>
            <city label="[City:]">Nancy</city>
            <country label="[Country:]">
               <country-code label="[Country Code:]">FR</country-
               code>
            </country>
            <citizenship
label="[Citizenship:]">Russian</citizenship>
```

```
          </non-us>
        </residence>
      </first-named-inventor>
</inventor-block>
```

If the EFS non-ICE source showed the preceding <inventor-block> data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Vivian Darkbloom, Nancy (FR)

EFS ICE 5.1 source:

Inventor Name (EFS ICE 5.1). The full name of each inventor/applicant,that is, <first-name> and <middle-name> (if any) and <last-name> and <suffix> (Jr., Sr., III, etc., if present),will be captured. If <prefix> appears in the source, that data (honorifics such as Mr., Mrs., Ms., Dr., Honorable) will **not** be captured. If the source shows an initial with a period (Raymond J. Johnson), the initial and the period will be captured (**Raymond J. Johnson**). If the source shows an initial without a period (Raymond J Johnson), the initial will be captured but no period will be captured (**Raymond J Johnson**).

Inventor Residence (EFS ICE 5.1). The residence of each inventor/applicant will be captured from what appears under <us-residency> or <non-us-residency>. For each <us-residency>, the <city> will be captured, the two-character <state> code will be captured, and the <country> **US** will be captured. For each <non-us-residency>, the <city> will be captured and the <country> will be captured. If the residence data appears all in uppercase in the source, it will be captured all in uppercase.

NOTE: Any <us-postal-address> data that appears in the source will **not** be captured. If no <us-residency> or no <non-us-residency> data appears in the source, **no** residence will be captured.

Inventor Status (EFS ICE 5.1). The <us-inventor-status> will be one of the following:

<us-signing-inventor/>	← The inventor's data will be captured.
<us-non-signing-inventor/>	← The inventor's data will be captured.
<us-inventor-representative/>	← The legal representative's data will be captured as described below.

When the <us-inventor-status> is <us-inventor-representative/>, the phrase legal representative [preceded by a comma] will be captured so that it follows the full name of the legal representative on the composed front page. See **inventor data example G (EFS ICE)** below.

U.S. Armed Services as Residence (EFS ICE 5.1). When the <us-residence> is <us-military-service>, the residence to be shown on the composed front page will be what the applicant has supplied, either a specific branch of service or U.S. Armed Services or the like, with the "serving in" value (where AA means "the Americas excluding Canada" and AE means "Europe, the Middle East or Africa" and AP means "the Pacific") captured as the <state>. In

each such residence, US will be captured as the <country>. See **inventor data example H (EFS ICE 5.1)** below.

inventor data example E (EFS ICE 5.1):

```
<us-inventor sequence="1">
   <prefix>Ms.</prefix>
   <first-name>Virginia</first-name>
   <last-name>Clemm</last-name>
   <nationality>
      <country>US</country>
   </nationality>
   <us-postal-address>
      <address-1>4321 Raven Court</address-1>
      <city>Usher</city>
      <state>VA</state>
      <postcode>99999</postcode>
      <country>US</country>
   </us-postal-address>
   <us-residence>
      <us-residency>
         <city>Usher</city>
         <state>VA</state>
         <country>US</country>
         </us-residency>
      </us-residence>
   <us-inventor-status>
      <us-signing-inventor/>
   </us-inventor-status>
</us-inventor>
```

If the EFS ICE 5.1 source showed the preceding data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Virginia Clemm, Usher, VA (US)

inventor data example F (EFS ICE 5.1):

```
<us-inventor sequence="1">
   <prefix>Mr.</prefix>
   <first-name>Michael</first-name>
   <last-name>Henchard</last-name>
   <nationality>
      <country>GB</country>
   </nationality>
   <us-postal-address>
      <address-1>121 Heart's Way</address-1>
      <city>Casterbridge</city>
      <postcode>W1KRP</postcode>
      <country>GB</country>
   </us-postal-address>
   <us-residence>
      <non-us-residency>
```

```
            <city>Casterbridge</city>
            <country>GB</country>
         </non-us-residency>
      </us-residence>
      <us-inventor-status>
         <us-signing-inventor/>
      </us-inventor-status>
   </us-inventor>
   <us-inventor sequence="2">
      <prefix>Mr.</prefix>
      <first-name>James</first-name>
      <last-name>Farfrae</last-name>
      <nationality>
         <country>GB</country>
      </nationality>
      <us-postal-address>
         <address-1>123 Corn Mill Road</address-1>
         <city>Casterbridge</city>
         <postcode>W1KRP</postcode>
         <country>GB</country>
      </us-postal-address>
      <us-residence>
         <non-us-residency>
            <city>Casterbridge</city>
            <country>GB</country>
         </non-us-residency>
      </us-residence>
      <us-inventor-status>
         <us-signing-inventor/>
      </us-inventor-status>
   </us-inventor>
```

If the EFS ICE 5.1 source showed the preceding data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Michael Henchard, Casterbridge (GB);
James Farfrae, Casterbridge (GB)

inventor data example G (EFS ICE 5.1):

```
   <us-inventor sequence="1">
      <prefix>Mr.</prefix>
      <first-name>James</first-name>
      <last-name>Jameson</last-name>
      <nationality>
         <country>US</country>
      </nationality>
      <us-postal-address>
         <address-1>777 Main Street</address>
         <city>Bonnie Doone</city>
         <state>NC</state>
         <postcode>99999</postcode>
         <country>US</country>
      </us-postal-address>
```

```
      <us-residence>
         <us-residency>
            <city>Bonnie Doone</city>
            <state>NC</state>
            <country>US</country>
         </us-residency>
      </us-residence>
      <us-inventor-status>
         <us-non-signing-inventor/>
      </us-inventor-status>
   </us-inventor>
   <us-inventor sequence="2">
      <prefix>Mr.</prefix>
      <first-name>Robert</first-name>
      <last-name>Robertson</last-name>
      <nationality>
         <country>US</country>
      </nationality>
      <us-postal-address>
         <address-1>333 Third Avenue</address-1>
         <address-2>Suite B</address-2>
         <city>Hayne</city>
         <state>NC</state>
         <postcode>00000</postcode>
         <country>US</country>
      </us-postal-address>
      <us-residence>
         <us-residency>
            <city>Hayne</city>
            <state>NC</state>
            <country>US</country>
         </us-residency>
      </us-residence>
      <us-inventor-status>
         <us-inventor-representative/>
      </us-inventor-status>
   </us-inventor>
```

If the EFS ICE 5.1 source showed the preceding data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

James Jameson, Bonnie Doone, NC (US);
Robert Robertson, legal representative,
Hayne, NC (US)

inventor data example H (EFS ICE 5.1):

```
   <us-inventor sequence="1">
      <prefix>COL</prefix>
      <first-name>Steven</first-name>
      <last-name>Canyon</last-name>
      <nationality>
         <country>US</country>
      </nationality>
```

```
      <us-residence>
         <us-military-service lang="This inventor is in the U.S. Armed
         Services serving in" values="AP"/>
      </us-residence>
      <us-inventor-status>
         <us-signing-inventor/>
      </us-inventor-status>
   </us-inventor>
```

If the EFS ICE 5.1 source showed the preceding data, the inventor name and residence would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Steven Canyon, U.S. Armed Services, AP (US)

Pre-Capture Verification

None.

Composition

Location

The inventor data will appear in the left column immediately below the INID (54) title-of-invention data.

Style

The inventor data's INID code will be (75) if assignee data is present at INID (73).

The inventor data's INID code will be (76) if no INID (73) data is present.

A residence (if available in the data source) will be shown for each inventor, whether or not assignee data is present.

If no residence is shown in the data source, no residence will be captured.

No post office address will be shown for any inventor.

Each U.S. residence will be shown as a city name plus the two-character code for the U.S. state/territory plus the parenthetical code US:

Richmond, VA (US)

Lodi, CA (US)

San Juan, PR (US)

Each non-U.S. residence will be shown as the city name plus the parenthetical two-character code for the country:

Paris (FR)

Antigonish (CA)

Tokyo (JP)

- INID code (75) or INID code (76) and the heading Inventor: or Inventors: will be shown as follows:

  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase
  - pluralize to Inventors: when there are two or more inventors

- Each inventor name will be shown as follows:

  - 9- on 10-point
  - Times New Roman Bold
  - uppercase and lowercase

- Residence data will be shown as follows:

  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase if uppercase and lowercase appear in the source; all uppercase if source shows <residence> data all in uppercase; except that (US) will always be shown in uppercase

- All other inventor data,including (1) all punctuation and (2) the name and title of a legal representative,will be shown as follows:

  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase

- Other instructions for showing inventor data:

  - **Multiple inventors.** Each inventor's name and residence will be shown in sequence, in narrative style:

    Harry U. Angstrom, Brewer, PA (US); **Janice Ursula Angstrom**, Brewer, PA (US); **Phoebe S. Caulfield**, New York, NY (US)

  - **Deceased or legally incapacitated inventor.** See information under **Data Source** above. The word "deceased" and the phrase "late of" will not be shown in the Yellow Book version of the inventor data.

- **Hyphenation.** Proper names will not be hyphenated to carry over to the next line, unless a hyphen is part of the correct spelling of the name.

- **Punctuation.** The punctuation shown in the examples below is to be used. A semicolon will be used to separate the data for each inventor.

- **Diacritical marks.** Diacritical marks that appear in the data source will be shown.

- **Abbreviations.** Abbreviations that appear in the source will be shown.

- **City Names.** Each city name, with respect to spelling, will be captured as it appears in the source. If the source shows the <city> as Milano, the city name will be captured as **Milano**. If the source shows the <city> as Milan, the city name will be captured as **Milan**.

Example(s)

(75) Inventor: **Uriah H. Heep**, Canterbury (GB)

(75) Inventors: **Gina O. Giraldi**, Milan (IT); **Wulf C. Erdmann**, Sandhofen (DE)

(76) Inventor: **Robert D Smith**, Hayne, NC (US)

(76) Inventors: **James R. White**, Spivey's Corner, NC (US); **Samuel Ross Vye**,, Alexandria, VA (US); **Marvin E. Mayne**, Alexandria, VA (US)

(75) Inventor: **John B. Tipton**, New York, NY (US); Olivia A. Tipton, legal representative, New York, NY (US)

(75) Inventor: **Stahr E. Vere**, U.S. Navy (US)

Correspondence Name & Address – no INID Code

Data Source

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
<correspondence-address>	<us-correspondence-address>
----------	<customer-number>
<name-1>	----------
<name-2>	----------
<address>	----------
<address-1>	----------
<address-2>	----------
<city>	----------
<state>	----------
<postalcode>	----------
<country><country-code>	----------

Primary BIB source or EFS non-ICE source:

If the source is the Primary BIB data or the EFS non-ICE bibliographic data, the following fields under <correspondence-address> will be captured when present: <name-1>, <name-2>, <address-1>, <city>, <state>, <postalcode>, <country-code>.

If the source shows the <correspondence-address> data in uppercase, the <correspondence-address> data will be captured in uppercase.

If the source shows an initial with a period (Armand E. Linton), the initial and the period will be captured (**Armond E. Linton**). If the source shows an initial without a period (Armand E Linton), the initial will be captured but no period will be captured (**Armond E Linton**).

for example (Primary BIB):

```
<correspondence-address>
   <name-1>Jerome J. Jaggers</name-1>
   <name-2>Jaggers, Jaggers, and Jarndyce</name-2>
   <address>
      <address-1>321 Duck Mills Drive</address-1>
```

```
         <city>Hayne</city>
         <state>NC</state>
         <postalcode>99999-9999</postalcode>
         <country>
            <country-code>US</country-code>
         </country>
      </address>
   </correspondence-address>
```

If the Primary BIB source showed the preceding <correspondence-address> data, the captured data would be shown as follows on the composed front page:

Jerome J. Jaggers
Jaggers, Jaggers, and Jarndyce
321 Duck Mills Drive
Hayne, NC 99999-9999 (US)

for example (EFS non-ICE):

```
   <correspondence-address label="[Correspondence Address:]">
      <name-1 label="[Name:]">RAYMOND J. JOHNSON, JR.</name-1>
      <address label="[Address:]">
         <address-1 label="[Address:]">2222 RAYJAY COURT</address-1>
         <city label="[City:]">BONNIE DOONE</city>
         <state label="[State or Province:]">NC</state>
         <postalcode label="[Postal Code:]">99999</postalcode>
         <country label="[Country:]">
            <country-code label="[Country Code:]">US</country-code>
         </country>
         <email label="[Email:]">rayjayjay@xyw.com</email>
         <telephone label="[Telephone:]">555-555-5555</telephone>
         <fax label="[Fax:]">555-555-5556</fax>
      </address>
   </correspondence-address>
```

If the EFS non-ICE source showed the preceding <correspondence-address> data, the captured data would be shown as follows on the composed front page:

RAYMOND J. JOHNSON, JR.
2222 RAYJAY COURT
BONNIE DOONE, NC 99999 (US)

EFS ICE 5.1 source:

The <us-correspondence-address> data will show <customer-number> only, as in the following example:

```
<us-correspondence-address><customer-number>99999</customer-number>
</us-correspondence-address>
```

The publication database contractor via a QUERY to the PGPub Division will request that the correspondence address be provided, and the publication database contractor, having received the correspondence address, will capture it by manual keying.

Pre-Capture Verification

None.

Composition

Location

The correspondence address will immediately follow the inventor data.

Style

The heading is Correspondence Address: [including the colon].

No INID code is used with the correspondence address.

In U.S. correspondence addresses, the two-character U.S. state/territory code will be shown and the parenthetical two-character code **(US)** will be shown.

Alexandria, VA 22311 (US)

Arlington, VA 22202 (US)

Atlanta, GA 31139-9388 (US)

In a non-U.S. correspondence address, the parenthetical two-character country code will be shown:

Toronto M5G 1R7 (CA)

- The heading Correspondence Address: [including the colon] will be shown as follows:
  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase
  - vertically aligned on the left with the side-headings Inventor:, Assignee:, etc.
- The correspondence address itself will be shown as follows:
  - 9- on 10-point
  - Times New Roman Bold
  - uppercase and lowercase if uppercase and lowercase appear in the source; all uppercase if source shows <correspondence-address> data all in uppercase; except that two-character country codes will always be shown in uppercase

- aligned on the left with the heading Correspondence Address:.

Example(s)

Correspondence Address:
Jonathan N. Davidson
123 Heitz Street
Fayetteville, NC 28303 (US)

Correspondence Address:
Sims & Hurley
Suite 2001
420 Wandlyn Avenue
Antigonish X2X 2B2 (CA)

Correspondence Address:
JOSEPH FENCE COMPANY
5555 SOPHIA STREET
HAYNE, NC 00000 (US)

Continued Prosecution Application (CPA) Notice – no INID Code

Data Source and Pre-Capture Verification

When a <continued-prosecution-application-flag> is present in the Supplemental BIB source, the publication database contractor will publish a Continued Prosecution Application (CPA) notice on the front page of the photocomposed patent application publication (PAP).

NOTE: When a <continued-prosecution-application-flag> is present in the Supplemental BIB source, the Red Book version of the PAP will include the <continued-prosecution-application-flag>. At a later date the Application Red Book DTD will be revised so that the wording of the CPA notice can be included in the Red Book version of the PAP.

Composition

Location

When a CPA notice is present on the PAP's front page, the notice will immediately follow the correspondence address.

Content

The wording of the CPA notice will be as shown below:

(*) Notice: This is a publication of a continued prosecution application (CPA) filed under 37 CFR 1.53(d).

Style

No INID code will be shown with the CPA notice. The asterisk within parentheses, the side-heading Notice, and the notice's wording will be shown as follows:

- 9-point
- Times New Roman
- uppercase and lowercase

When a CPA notice appears on the PAP's front page, no asterisk will be shown in the masthead of the PAP.

Assignee Name(s) & Residence(s) – INID (73)

Data Source

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
<assignee>	<us-pgpub-assignee>
<name>	----------
<name-prefix>	<prefix>
<given-name>	<first-name>
<middle-name>	<middle-name>
<family-name>	<last-name>
<name-suffix>	<suffix>
<organization-name>	<orgname>
<address>	<us-postal-address>
<address-1>	<address-1>
<address-2>	<address-2>
<city>	<city>
<state>	<state>
<postalcode>	<postcode>
<country><country-code>	<country>

Primary BIB source or EFS non-ICE source:

The following items, when they are present under <assignee> in the source, will be captured: <name> (including any <given-name>, <middle-name>, <family-name>, and <name-suffix>) and/or <organization-name>, plus <city>, <state>, <country-code>. If <name-prefix> data appears in the source, that data [honorifics such as Mr., Mrs., Ms., Dr., Honorable] will **not** be captured.

Only the items of data that are present in the source will be captured. If the source shows <organization-name> but no <city>, no <state>, and no <country-code>, then only the <organization-name> will be captured. If there is no <assignee> data in the source, no assignee data will be captured.

If the source shows an initial with a period (`John Q. Public`), the initial and the period will be captured (**John Q. Public**). If the source shows an initial without a period (`John Q Public`), the initial will be captured but no period will be captured [**John Q Public**].

Under PTO rules the applicant may elect to supply the assignee name and address on an Application Data Sheet (ADS). The assignee name and address on the ADS may have been used by the PTO as its source for entering the assignee information into PALM and subsequently into the Primary BIB source. The publication database contractor will ignore any assignee information that may appear on the PACR/IFW image of the ADS. The publication database contractor's sole source for the capture of the assignee information will be the `<assignee>` information in the electronic bibliographic source, such as the Primary BIB source. If assignee information appears in the PACR/IFW image of the ADS but does not appear in the electronic bibliographic source, no assignee data will be captured.

for example (Primary BIB):

```
<assignee>
   <organization-name>Reddle Corporation</organization-name>
   <address>
      <address-1>5555 Hardy Lane</address-1>
      <city>Hayne</city>
      <state>NC</state>
      <postalcode>99999</postalcode>
      <country>
         <country-code>US</country-code>
      </country>
   </address>
</assignee>
<assignee>
   <name>
      <given-name>Margaret</given-name>
      <family-name>Pilkington-Bell</family-name>
   </name>
   <address>
      <address-1>Ticklings</address-1>
      <address-2>17 Tolpuddle Way</address-2>
      <city>Nether Plye</city>
      <postalcode>PW22 6EW</postalcode>
      <country>
         <country-code>GB</country-code>
      </country>
   </address>
</assignee>
```

If the Primary BIB source showed the preceding `<assignee>` data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

> **Reddle Corporation**, Hayne, NC (US);
> **Margaret Pilkington-Bell**, Nether Plye (GB)

for example (EFS non-ICE):

```
<assignee label="[Assignee:]">
```

```
      <organization-name label="[Organization Name:]">Snopes and
      Varner Enterprises</organization-name>
      <address label="[Address:]">
            <address-1 label="[Address:]">132-A Sutpen Street</address-
      1>
            <city label="[City:]">Frenchmans Bend</city>
            <state label="[State:]">MS</state>
            <postalcode label="[Postal Code:]">99999</postalcode>
            <country label="[Country :]">
            <country-code label="[Country Code:]">US</country-code>
            </country>
      </address>
   </assignee>
```

If the EFS non-ICE source showed the preceding <assignee> data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Snopes and Varner Enterprises,
Frenchmans Bend, MS (US)

EFS ICE 5.1 source:

The following items, when they are present under <us-pgpub-assignee>, will be captured: <first-name>, <middle-name>, <last-name>, <suffix>) and/or <orgname>, plus <city>, <state>, <country>. If <prefix> data appears in the source, that data [honorifics such as Mr., Mrs., Ms., Dr., Honorable] will **not** be captured.

Only the items of data that are present in the source will be captured. For example, if the source shows <orgname> but no <city>, no <state>, and no <country>, then only the <orgname> will be captured. For example, if there is no <assignee> data in the source, no assignee data will be captured.

If the source shows an initial with a period (John Q. Public), the initial and the period will be captured (**John Q. Public**). If the source shows an initial without a period (John Q Public), the initial will be captured but no period will be captured (**John Q Public**).

for example (EFS ICE 5.1):

```
   <us-pgpub-assignee>
      <orgname>International Sneezeguard Corporation</orgname>
      <us-postal-address>
         <address-1>Suite 222, Tri-Beane Towers</address-1>
         <address-2>888 Iceberg Ave.</address-2>
         <city>Rowe</city>
         <state>ME</state>
         <postcode>99999</postcode>
         <country>US</country>
      </us-postal-address>
   </us-pgpub-assignee>
```

If the EFS ICE 5.1 source showed the preceding <pg-pub-assignee> data, the captured data would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

International Sneezeguard Corporation,
Rowe, ME (US)

Pre-Capture Verification

None with respect to the photocomposed front page.

Composition

Location

The assignee data, when present, will follow the correspondence address.

Style

INID code (73) will be used for the assignee data.

The heading is Assignee: or Assignees: [including the colon].

Each U.S. assignee's residence will be shown as a city name plus the two-character code for the U.S. state/territory plus the parenthetical code US:

Richmond, VA (US)

Lodi, CA (US)

San Juan, PR (US)

Each non-U.S. assignee's residence will be shown as the city name plus the parenthetical two-character code for the country:

Paris (FR)

Antigonish (CA)

Tokyo (JP)

NOTE: The assignee "type" code that is captured for Red Book will not appear on the photocomposed front page.

- INID code (73) and the heading Assignee: or Assignees: are shown as follows:
  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase
  - INID code (73) and the heading Assignee: or Assignees: are shown as follows:

- Assignee name(s) are shown as follows:

  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase

- Assignee residence data and all other assignee data are shown as follows:

  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase

- Additional instructions:

  - **Multiple assignees.** Each assignee name and residence address will be shown in sequence, in narrative style.

  - **Hyphenation.** Proper names will not be hyphenated to carry over to the next line, unless a hyphen is part of the correct spelling of the name.

  - **Punctuation.** Observe the punctuation in the examples shown below. Use a semicolon to separate data on each assignee.

  - **Diacritical marks.** Diacritical marks that appear in the source will be shown.

  - **Abbreviations.** Abbreviations that appear in the source will be shown.

  - **City Names.** With respect to spelling, each city name will be captured as it appears in the source. If the source shows the <city> as Milano, the city name will be captured as **Milano**. If the source shows the <city> as Milan, the city name will be captured as **Milan**.

Example(s)

(73) Assignee: **Smith Plant Company**, Alexandria, VA (US)

(73) Assignees: **Carlo X. Piano**, Rome (IT); **Jayne Payne Inc.**, Baltimore, MD (US)

(73) Assignees: **Joseph K & Company**, Franz, KY (US); **Kastle Products**, Franz, KY (US)

Instructions for Determining Assignee Type Code [Red Book only]

If the Primary BIB source shows an assignee, the publication database contractor is required to determine and capture the assignee's "type" code, which is to be included in the Red Book version of the published application.

If there are multiple assignees in a given application, a type code must be determined and captured for each assignee.

The assignee type code will not appear on the photocomposed (Yellow Book) version of the published application.

The "assignee type" code consists of two numeric characters.

- The content of the first position will be either a 0 (zero) or a 1 (one):

  0 = The application is 100% assigned,that is, either the assignee data source indicates no partial assignment at all or the data source indicates partial assignments with fractional interests that add up to 100%.

  1 = The application is less than 100% assigned,that is, the data source indicates partial assignments with fractional interests and the fractional interests add up to less than 100%.

  It is not known whether the <assignee> blocks of Primary BIB sources will include any indications of partial assignment ("a part interest") or any indications of partial assignments with fractional interests ("half interest, "25 % interest," etc.). When the data source shows no indications of partial assignment, the publication database contractor will assume that the application is 100% assigned. That is, 0 will be the default content of the first position.

- The content of the second position will be one of the following numbers:

  2 = U.S. private corporate entity (company, corporation, institution, etc.)

  3 = foreign private group entity (company, corporation, institution, etc.)
  4 = U.S. individual

  5 = foreign individual

  6 = federal government (U.S.)

  7 = foreign government

  8 = county government (U.S.)

  9 = state government (U.S.)

U.S. *versus* **foreign:** With respect to determining a U.S. code (2, 4, 6, 8, or 9) versus a foreign code (3, 5, or 7), the determining factor is the assignee's <country-code>.

U.S. private corporate entity *versus* **U.S. government (federal, county, state) entity:** With respect to determining a code 2 versus one of the three U.S. government codes (6, 8, or 9), the information below is offered as a guide. When it cannot be determined whether the U.S. assignee is a private corporate entity or a government entity, the publication database contractor must use code 2 (U.S. private corporate entity) as the default.

Code 6 , When the **U.S. federal government** is the assignee, the data source may show the assignee's name as beginning with the phrase "The United States of America as represented by" and/or may show the assignee name as containing an otherwise recognizable organizational name (Department of Energy, Secretary of Defense, Director of the National Security Agency, Bureau of Engraving and Printing, Administrator of the National Aeronautics and Space Administration, etc.).

NOTE: The Tennessee Valley Authority (TVA) is a U.S. federal government entity. The American Red Cross is a private (non-governmental) entity.

Code 8 , If the data source clearly identifies the assignee as a county government agency (for example, Orange County Water District, Lee County Mosquito Control District, etc.), the assignee must be coded as a **U.S. county government** entity.

Code 9 , If the data source clearly identifies a state government entity (for example, Virginia Marine Resources Commission or New York State Office of Science, Technology, and Academic Research), then the assignee should be coded as a **U.S. state government** entity. It's common for U.S. state government assignees to be institutions of higher learning or related organizations (such as The University of Vermont and State Agricultural College, Board of Regents of the University of Texas System, Iowa State University Research Foundation Inc., South Dakota State University).

NOTE: The name of a university or college is not always definitive as to whether or not the institution is a state entity. For example, the University of Pennsylvania is a private university, while Rutgers is a state university.

foreign private group entity *versus* **foreign government entity:** The information below may be helpful in determining whether an assignee is code 3 or code 7. If it cannot be determined whether a foreign group entity is private or governmental, the publication database contractor should use code 3 (foreign private group entity) as the default.

Code 3 , When the <organization-name> contains one of the following abbreviations, words, phrases, suffixes, etc., and the <country-code> is as indicated below, the assignee must be considered a **foreign private group entity**:

DE

A.G. *OR* Aktiengesellshaft
Firma
Gebr. *OR* Gebrüder
GmbH *OR* Gesellschaft mit beschränkter Haftung
K.G. *OR* Kommanditgesellschaft

DK

A/s *OR* Aktieselskab

ES

Cia *OR* CompaZia
S.R.L. *OR* Sociedad de Responsibilidad Limitada

FI

-yhtio
Oy *OR* Osakeyhtio

FR

Cie *OR* Compagnie
S.A. *OR* Société Anonyme
Etablissement
Association pour le Rationalisation et la Mecanisation de l'Exploitation Forestiere
Automobiles Peugeot
Centre Experimental de Recherches et d'Etudes du Bâtiment et de Travaux Publics
Institut de Recherches de la Sidérurgie Française
Institut Français du Pétrole

IT

Ca *OR* Compagnia
S.p.A. *OR* Società per Azioni

JP

Kabushiki Kaisha
Kogaku

NL

N.V. *OR* Naamloze Venootschap
Gebr. *OR* Gebroeders

NO

A/S *OR* Aksjeselskap

SE

A.B. *OR* Aktiebolag

Code 7 , Government entities commonly include words like "Ministry" or "Department" or "Bureau." Some examples are shown below. If the <organization-name> contains the one of the following words or phrases, and the <country-code> is as indicated below, the assignee should be considered a **foreign government entity**:

AU

The Commonwealth of Australia
Australian Atomic Energy Commission
Commonwealth Scientific and Industrial Research Organization

BE

Institut National *OR* Nationaal Instituut
… des Industries Extractives
… des Radio Elements/voor Radio-Elementen

BG

State Research Institute of Darvenitza

CA

Her Majesty the Queen in Right of Canada, as represented by
… the Minister of Energy, Mines, and Resources
… the Minister of National Defence of Her Majesty's Canadian Government
Atomic Energy of Canada Limited
Canadian Arsenale Limited
Societe Nationale de l'Amiante

FR

L'Etat Français, représente par
… le Secrétaire d'Etat
… aux Postes et Télécommunications
… le Délègue Ministériel
… pour l'Armement
Agence Spatiale Européenne
Agence Nationale
… de Valorisation de la Recherche
Bureau
… de Recherches Géologique et Minières
Centre National
… d'Etudes des Télécommunications
… d'Etudes Spatiales
… d'Etudes de l'Energie Nucléaire
… pour l'Exploitation des Océans

… de la Recherche Scientifique
… de Transfusion Sanguine
Commissariat
… a l'Energie Atomique
Etablissement Publics
… Télédiffusion de France
Institut National
… des Industriale Extractives
… de la Recherche Agronomique
… de Recherche Chimique Applique
… de Recherche et de Sécurité pour la Prévention des Accidents du Travail et des Maladies Professionnelles
… de la Santé et de la Recherche Médicale
Office National
… d'Etudes et de Recherches Aérospatiales
Régie National
… des Usines Renault
Service d'Exploitation Industrielle
… des Tabacs et des Allumettes
Service National
… Electricité de France
Societe Nationale
… Elf Aquitaine
… d'Etude et de Construction de Moteurs d'Aviation
… Industrielle et Aérospatiale
… des Poudres et Explosifs

GB

British Aerospace Public Limited Company
British Airways Board
British Broadcasting Corporation
British Railway Board
British Steel Corporation
Coal Industry (Patents) Limited
The Defence Evaluation and Research Agency
The Electricity Council
National Coal Board
National Research Development Corporation
The Post Office
Public Health Laboratory Service Board
Secretary of State for
… Defence in Her Britannic Majesty's Government of the United Kingdom of Great Britain and Northern Ireland
… Minister of Agriculture, Fisheries, and Food in Her Britannic Majesty's Government of the United Kingdom of Great Britain and Northern Ireland
United Kingdom Atomic Energy Authority

IL

Israel Institute for Biological Research
State of Israel, Ministry of Defense Armaments Development Authority

IT

Comitato Nazionale per l'Energia Nucleare
Consiglio Nazionale delle Ricerche

JP

Agency of Industrial Science and Technology
Basic Industries Bureau of Ministry of International Trade and Industry
Extra-Ministerial Bureau of Ministry of International Trade and Industry
Japan Atomic Energy Research Institute
Japanese National Railway
Ministry of Agriculture, Forestry and Fisheries
Ministry of International Trade and Industry
Municipal Government [for example, Osaka Municipal Government]
National Institute for Researches in Inorganic Metals
National Tax Administration Agency
National Research Institute for Metals
Nippon Telegraph and Telephone Public Corporation
Prefectural Government [for example, Iwate Prefectural Government]

KR

Agency for Defense Development

LU

European Atomic Energy Community (EURATOM)

MX

Consejo Nacional de Ciencia y Technologia

NO

Institutt for Atomenergi

PL

Ministertwo …

Application Number – INID (21)

Data Source

The source for the INID (21) application number is the Supplemental BIB data, where the <application-number> is located within the <domestic-filing-data>.

The <application-number> data will be presented as an eight-position number, in which the first two positions constitute the series code and the remaining six positions constitute the sequential (serial) number.

In the Supplemental BIB source, the <application-number> data will be followed by an <application-number-series-code> field that repeats the series code.

Application Number Example:

```
<domestic-filing-data>
   <application-number>09123456</application-number>
   <application-number-series-code>09</application-number-series-
   code>
   <filing-date>1999-02-02</filing-date>
</domestic-filing-data>
```

If the sources showed the above data, the application number would be captured for the composed front page as **09/123,456**.

Pre-Capture Verification

None.

Composition

Location

The (21) Appl. No.: data immediately follows the assignee data; if there is no assignee, it immediately follows the inventor and correspondence address data.

Style

- INID code (21) and the heading Appl. No.: [including the colon] are shown as follows:
  - 9-point

  - Times New Roman
  - uppercase and lowercase
- The application number itself is shown as follows:

  - 9-point
  - Times New Roman Bold
  - The entire application number is to be shown – that is, a two-digit series code, a diagonal, and a six-digit sequential number (with a comma after the third digit).

Example(s)

(21) Appl. No.: **09/123,456**

U.S. Filing Date – INID (22) OR PCT Filing Date – INID (22)

Data Source

- **U.S. filing date:**

  The U.S. filing date will be captured as the INID (22) date when the application being published is a U.S. application filed under 35 U.S.C. 111(a),that is, any application other than a "National Stage" application as defined below.

  The U.S. filing date will be captured from the Supplemental BIB source. The `<domestic-filing-data>` block will include the application's `<filing-date>`, which will be presented as an eight-position number. The first four positions constitute the year of filing, the fifth and sixth positions constitute the month of filing [`01` through `12`], and the seventh and eighth positions constitute the day of filing [`01` through `31`].

  For example:

```
<domestic-filing-data>
   <application-number>09999888</application-number>
   <application-number-series-code>09</application-number-
   series-code>
   <filing-date>2000-03-24</filing-date>
</domestic-filing-data>
```

  The U.S. filing date shown above would be captured for the composed front page as **Mar. 24, 2000**.

- **PCT filing date:**

  The PCT application's filing date will be captured as the INID (22) date when the application being published is the U.S. National Stage of an international (PCT) application submitted under 35 U.S.C. 371. This is when the data source shows `<continuity-data>` with the tagging `<this application is a/><a-371-of-international/>` and/or when the `<international-conventions>` data includes a `<pct-application><document-date>` as shown below.

  The PCT filing date will be captured from the Supplemental BIB source, where the `<document-date>` of the `<pct-application>` is located within the `<international-conventions>` data block. The `<document-date>` will be presented as an eight-position number, in which the first four positions constitute the year of filing, the fifth and sixth positions constitute the month of filing [`01` through `12`], and the seventh and eighth positions constitute the day of filing [`01` through `31`].

PCT Filing Example:

```
<international-conventions>
   <pct-application>
      <document-id>
         <doc-number>PCT/JP01/54321</doc-number>
         <kind-code>00</kind-code>
         <document-date>2001-11-04</doc-number>
         <country-code>WO</country-code>
      </document-id>
   </pct-application>
   <usc102e-date>2001-11-04</usc102e-date>
   <pct-publication>
      <document-id>
         <doc-number>WO02/11111</doc-number>
         <kind-code>A</kind-code>
         <document-date>2002-06-20</document-date>
         <country-code>WO</country-code>
      </document-id>
   </pct-publication>
</international-conventions>
```

The PCT filing date shown above would be captured for the composed front page as **Nov. 4, 2001**.

Pre-Capture Verification

None.

Composition

Location

The INID (22) date,whether it is the U.S. filing date or the PCT filing date, immediately follows the INID (21) application number.

Style

If the U.S. filing date is being shown, the heading Filed: [including the colon] is to be used.

If the PCT filing date is being shown, the heading PCT Filed: [including the colon] is to be used.

- INID code (22) and the heading Filed: or PCT Filed: are shown as follows:
  - 9-point
  - Times New Roman

- uppercase and lowercase

- The filing date itself is shown as follows:

  - 9-point
  - Times New Roman Bold
  - uppercase and lowercase
  - month abbreviated as follows:

    Jan. Feb. Mar. Apr. May Jun.
    Jul. Aug. Sep. Oct. Nov. Dec.

Example(s)

When application being published was filed under 35 U.S.C. 111(a)

(22) Filed: **Mar. 24, 2000**

When application being published is a U.S. National Stage application under 35 U.S.C. 371

(22) PCT Filed: **May 2, 2002**

Rule 47 Indicator – No INID Code

Data Source

If a Rule 47 indicator is present, it will appear in the Supplemental BIB source's <domestic-filing-data>. If present, the Rule 47 indicator presumably will be shown by the tag <rule47> or the like and presumably will be shown either as an empty tag or as a tag pair with yes/no content:

Rule 47 Example:

```
<domestic-filing-data>
   <application-number>09000000</application-number>
   <application-number-series-code>09</application-number-series-
   code>
   <filing-date>2001-10-19</filing date>
   <rule47></rule47>OR<rule47>yes</rule47>
<domestic-filing-data>
```

Pre-Capture Verification

None.

Composition

Location

When the Rule 47 indicator appears in the source, a Rule 47 notation will be shown immediately below the INID (22) date.

Style

No INID code is to be used with the Rule 47 notation. The Rule 47 notation will consist of the parenthetical phrase (Under 37 CFR 1.47).

- The Rule 47 notation will be shown as follows:
  - 9- on 10-point
  - Times New Roman
  - uppercase and lowercase
  - beneath, and flush with, the INID (22) date

Example(s)

In the example below, the Rule 47 notation is shown in context with the INID (22) date.

(22) Filed: **Dec. 14, 1997**
(Under 37 CFR 1.47)

102 (e) Date – No INID Code

NOTE :
The instructions having to do with the 102(e) Date field are being reconsidered by the USPTO. In the interim, the publication database contractor is to follow this rule:

- Regardless of whether or not information is included in the Supplemental BIB source `<usc102e-date>` field, no 102(e) information will be captured and no 102(e) information will appear on the publication's composed front page.

U.S. National Stage of Patent Cooperation Treaty Data – INID (86) and (87)

Data Source

Supplemental BIB as source for National Stage data:

When the Supplemental BIB source shows <international-conventions> data, the following items will be captured:

- the <doc-number> of the <pct-application>
- the <doc-number> of the <pct-publication>
- the <document-date> of the <pct-publication>

In the source, each <document-date> will appear as an eight-position number, with the first four positions consisting of the year, the fifth and sixth positions consisting of the month [01 through 12], and the seventh and eighth positions consisting of the day [01 through 31].

NOTE: For the composed front page the <document-date> of the <pct-application> is captured as the PCT filing date. See ***U.S. Filing Date – INID (22) OR PCT Filing Date – INID (22)*** and see data source example below.

secondary source for National Stage data:

- When the Supplemental BIB source shows no <international-conventions> data yet the continuity data indicates that the application being published (as opposed to a parent) is the National Stage of a PCT application – that is, the Primary BIB or EFS non-ICE source's <continuity-information> block includes <this-application-is-a/><a-371-of-international> data, or the EFS ICE 5.1 source's <us-continuity-claims> block includes <us-continuity-type> data with the value "NST" (National Stage) as applied to the application being published – then the Primary BIB's or EFS non-ICE's <continuity-information> block or the EFS ICE 5.1's <us-continuity-claims> block will serve as the source for the National Stage data.

- When the application being published is a National Stage application, the <this-application-is-a/><a-371-of-international> data or the <us-continuity-type> data with the value "NST" will not be captured as continuity (related U.S. applications) data. See ***Related U.S. Applications – INID (60, 62, 63, 66)***.

PCT publication data (WO document number and date):

- The publication database contractor will capture the <doc-number> of the <pct-publication> so that it contains the number of digits that appear in the PALM source. For WO documents published before July 1, 2002, the WO publication number shows five digits after the diagonal, as in WO02/01234 and WO02/12345. For WO documents

published on or after July 1, 2002, the WO publication number shows six digits after the diagonal, as in WO02/012345 and WO02/123456.

- If the WO document number and date are <u>not</u> present in the source, no PCT publication data will be captured.

<u>number of digits within document numbers</u>

With respect to the number of digits within the PCT application number (<doc-number> of the <pct-application>) and the number of digits within the WO publication number (<doc-number> of the <pct-publication>), <u>the publication database contractor will capture these document numbers as they appear in the PALM bibliographic source</u>.

PCT/GB2004/123456 ← six-digit serial number as of January 1, 2004
↑
four-digit year as of January 1, 2004

WO2004/123456 ← six-digit serial number as of July 1, 2002
↑
four-digit year as of January 1, 2004

example of National Stage data source (Supplemental BIB):

```
<international-conventions>
   <pct-application>
      <document-id>
         <doc-number>PCT/JP01/54321</doc-number>
         <document-date>2001-11-04</document-date>      ← INID (22) date
         <country>
            <country-code>WO</country-code>
         </country>
      </document-id>
   </pct-application>
   <pct-publication>
      <document-id>
         <doc-number>WO02/11111</doc-number>
         <kind-code>A</kind-code>
         <document-date>2002-06-20</document-date>
         <country>
            <country-code>WO</country-code>
         </country>
      </document-id>
   </pct-publication>
</international-conventions>
```

If the source showed the above data, the composed front page would show the following information (see under **<u>Composition</u>**):

(22) PCT Filed: **Nov. 4, 2001**

(86) PCT No.: **PCT/JP01/54321**

(87) PCT Pub. No.: **WO02/11111**
PCT Pub. Date: **Jun. 20, 2002**

Pre-Capture Verification

None.

Composition

Location

The following data, when present, will be shown after the § 102(e) Date: .

Style

The PCT application number is the PCT No. The PCT publication number is the PCT Pub. No. The PCT publication date is the PCT Pub. Date.

The INID codes are shown below:

(86) PCT No.:

(87) PCT Pub. No.:

PCT Pub. Date:

- INID codes (86) and (87) will be shown as follows:
  - 9-point
  - Times New Roman
- The headings PCT No:, PCT Pub. No.:, and PCT Pub. Date: [with colons] will be shown as follows:
  - 9-point
  - Times New Roman
  - uppercase and lowercase
- The international application number and the international publication number will be shown as follows:

- 9-point
- Times New Roman Bold
- uppercase alphanumeric with diagonals

- The international publication date is shown as follows:

  - 9-point
  - Times New Roman Bold
  - uppercase and lowercase
  - month abbreviated as follows:

    Jan. Feb. Mar. Apr. May Jun.
    Jul. Aug. Sep. Oct. Nov. Dec.

Example(s)

(86) PCT No.: **PCT/JP01/54321**

(87) PCT Pub. No: **WO02/11111**

PCT Pub. Date: **Jun. 20, 2002**

PG Correction Data INID (15); Prior PG Publication Data INID (65)

Data Source

- ***INID (15) PG Correction Data [to appear on A9 and P9 documents]***

If the publication is an A9 document [corrected publication of utility PAP] or a P9 document [corrected publication of a PPAP], the "front page" data will include INID (15) "Correction of" data (1) which identifies the prior Pre-Grant Publication that is being corrected and (2) which identifies the locations of corrections.

(1) source for the identification of the prior publication that is being corrected:

The `<prior-publication>` element identifying the prior publication that is being corrected,specifically, its `<doc-number>`, `<kind-code>`, and `<document-date>`,should be present on the Supplemental BIB tape. If the `<prior-publication>` element is not present on the Supplemental BIB tape and the export includes a Primary BIB tape, the publication database contractor should check to see if the `<previous-publication-information>` element is present on the Primary BIB tape. If neither the Supplemental BIB tape nor the Primary BIB tape shows prior/previous publication data, the publication database contractor will e-mail the PGPub Division, and the PGPub Division's e-mail response will provide the `<prior-publication>` data.

For a description of what this data looks like in the Supplemental BIB source or the Primary BIB source, see below under ***INID (65) Prior PG Publication Data [to appear on A2, A9, P4, and P9 documents]***.

The captured data for INID (15) would be composed as follows:

Correction of US 2001/0005836 A1 Aug. 16, 2001

(2) source for identifying the location(s) of the correction(s):

The PGPub Division of the Office of Patent Publication will, via a written Memorandum of Authorization of Corrections for A9 [or P9] Publication, provide the publication database contractor with the contents of the "See …" line(s) that are to be captured and published as part of the INID (15) data on the photocomposed front page of each A9 or P9 document.

Examples of "See …" lines in various categories:

bibliographic ["front page"] data. The INID codes and/or the headings of the corrected data would appear in the "See …" line. For example:

> See (54) Title of Invention, § 102(e) Date,
> (30) Foreign Application Priority Data, and
> (57) Abstract.

drawings. In the "See …" line, each corrected drawing would be identified by Figure number. For example:

> See Figures 1 and 5.

specification. In the "See …" line, the corrected paragraphs would be identified by paragraph number. For example:

> See Paragraphs [0057], [0090], and [0111].

Sequence Listing. The "See …" line would indicate that the Sequence Listing has been corrected:

> See Sequence Listing.

claims. In the "See …" line, the corrected claims would be identified by claim number. For example:

> See Claim 10.

- ***INID (65) Prior PG Publication Data [to appear on A2, A9, P4, and P9 documents]***

The PALM bibliographic data exported by the USPTO to the publication database contractor for either REPUBLICATION (A2/P4) processing or CORRECTED PUBLICATION (A9/P9) processing must show `<prior-publication>` data.

The `<prior-publication>` element should be present on the Supplemental BIB tape. If the `<prior-publication>` element is not present on the Supplemental BIB tape and the export includes a Primary BIB tape, the publication database contractor should check to see if the `<previous-publication-information>` element is present on the Primary BIB tape. If neither the Supplemental BIB tape nor the Primary BIB tape shows prior/previous publication data, the publication database contractor will e-mail the PGPub Division, and the PGPub Division's e-mail response will provide the `<prior-publication>` data.

The following is an example of `<prior-publication>` data on a Supplemental BIB tape:

```
<prior-publication>
   <document-id>
      <doc-number>0005836</doc-number>
      <kind-code>A1</kind-code>
      <document-date>2001-08-16</document-date>
      <country-code>US</country-code>
   </document-id>
```

```
</prior-publication>
```

The following is an example of <previous-publication-information> data on a Primary BIB tape:

```
<previous-publication-information>
   <document-id>
      <doc-number>0005836</doc-number>
      <kind-code>A1</kind-code>
      <document-date>2001-08-16</document-date>
      <country-code>US</country-code>
   </document-id>
</previous-publication-information>
```

The <doc-number> should be captured so that it includes the four-digit year from the <document-date>. Using the above examples, the prior publication's publication number and publication date would be composed as follows:

US 2001/0005836 A1 Aug. 16, 2001

- ***export of data sources for A9 or P9 publication***

The PGPub Division will prepare a **Memorandum of Authorization of Corrections for A9/P9 Publication** and will send it to the publication database contractor. This document will do the following:

- The Memorandum of Authorization of Corrections for A9/P9 Publication will identify all of the corrections that must be made. The corrections may be identified within the body of the Memorandum of Authorization of Corrections for A9/P9 Publication, or they may be identified in an attachment (for example, a copy of the applicant's request for corrected publication may be attached to the Memorandum of Authorization of Corrections for A9/P9 Publication).

- The Memorandum of Authorization of Corrections for A9/P9 Publication will provide the contents of the "See …" line(s) to be published in the A9 or P9 publication's INID (15) data.

The PGPub Division will take the necessary steps to see that the electronic data sources are exported to the publication database contractor for A9 or P9 publication processing:

- **Patent Application Locating and Monitoring (PALM) bibliographic data sources (Primary and Supplemental)** will be exported to the publication database contractor for A9/P9 processing. This export will include the following:

  (i) the PPD (projected publication date)
  (ii) "corrected" will appear in the value attribute of the <publication-filing-type> element.
  (iii) <previous-publication-information><prior-publication> blocks
  (iv) any corrections that have been made to the PALM data

- If the abstract/specification/claims data source is a PACR image file, the **PACR image file** will be exported to the publication database contractor for the A9/P9 processing.

- If the abstract/specification/claims data source is an electronic filing, the **Electronic Filing System (EFS) submission** will be exported to the publication database contractor for the A9 processing.

- If the applicant filed table(s) on compact disc(s), a **copy of each CD containing table(s)** will be obtained from the Office of Initial Patent Examination (OIPE) and will be exported to the publication database contractor for the A9/P9 processing.

- If the applicant filed a sequence listing, a **tape of the sequence listing** will be obtained from ABSS and will be exported to the publication database contractor for the A9/P9 processing.

Pre-Capture Verification

additional quality checks in A9/P9 processing. Inasmuch as the (re)capturing of data from (re)exported sources creates an opportunity for the introduction of new errors, the publication database contractor (PADACAP Contractor) will perform additional quality checks during A9 or P9 processing.

For each A9 or P9 publication the PADACAP Contractor will do the following:

- Make sure all corrections are made based on the Memorandum of Authorization of Corrections for A9/P9 Publication.

- Reprocess the entire application and perform an additional quality check on the drawings, abstract, specification, and claims.

Composition

Location

When present, data about prior related pre-grant publications will follow the INID (22) filing date and will appear under the heading **Prior Publication Data**. If U.S. national stage PCT data is present, then the **Prior Publication Data** will follow the U.S. national stage PCT data.

Style

If present, "PG correction data" will appear first and will be identified by INID code (15). Each "PG correction data" entry will consist of two lines:

- The first line will consist of the words "Correction of", plus the prior Pre-Grant Publication's number, plus the prior Pre-Grant Publication's date.

- The second line will consist of an indication of the location of the correction(s).

If present, "prior PG publication data" will follow and will be identified by INID code (65). Each "prior PG publication data" entry will consist of a single line showing two items, the first of which is the complete prior Pre-Grant Publication's number and the second of which is the prior Pre-Grant Publication's date.

- The heading **Prior Publication Data** will be shown as follows:
  - 9-point
  - Times New Roman Bold
  - uppercase and lowercase
  - centered in the column
  - avoid widow heading wherever possible

- INID codes (15) and (65) will be shown as follows:
  - 9-point
  - Times New Roman

- The data itself,that is, lines beginning with the phrase Correction of and lines beginning with the word See,will be shown as follows:
  - 8-point
  - Times New Roman
  - uppercase and lowercase
  - At the end of a Correction of … line, do not use a period:

    Correction of US 2001-0019557 A2 Mar. 1, 2001

  - If there are multiple See … lines, each is to start on a new line in accordance with the following order:

    See … [*bibliographic data*].
    See … [*drawings*].
    See … [*specification*].
    See Sequence Listing.
    See … [*claims*].

  - At the end of a See … line, use a period. Within a See … line, use punctuation (including commas and hyphens), and connective wording as needed. Follow capitalization style and abbreviation style shown in these examples:

    See (54) Title of Invention, (21) Appl. No.
    and (22) Filed.

See (60) Related U.S. Application Data.

See Correspondence Address, (51) Int. Cl..[7], (52) U.S. Cl., and (57) Abstract.

See FIG. 1.

See FIGS. 1 and 10.

See Paragraph [0015].

See Paragraphs [0022], [0025], and [0058]-[0065].

See Claim 9.

See Claims 1, 5, 7-12, and 18.

Example(s)

when INID (15) data and INID (65) data are both present

Prior Publication Data

(15) Correction of US 2002/0019557 A2
See (30) Foreign Application Priority Data.
See Paragraphs [0027] and [0090].
See Claims 1-10.

(65) US 2002/0070889 A2 Jun. 14, 2002
US 2002/0019557 A2 Mar. 1, 2002
US 2002/0000045 A1 Jan. 1, 2002

when only INID (15) data is present

Prior Publication Data

(15) Correction of US 2001/0018790 A1
See Claim 5.

when only INID (65) data is present

Prior Publication Data

(65) US 2003/0060207 A2 Apr. 24,2003
US 2003/0051333 A1 Feb. 20, 2003

Related U.S. Applications – INID (60, 62, 63, 66)

Data Source

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE5.1***
<continuity-information>	<us-continuity-claims>
<continuity-data><parent> <this-application-is-a/> <continuation-of/>	<us-continuity-type sequence="*n*" values="CON"><us-relation><parent><document-id lang="This application is a continuation of _____"><country>*cc*</country>
<continuity-data><parent> <this-application-is-a/> <division-of/>	<us-continuity-type sequence="*n*" values="DIV"><us-relation><parent><document-id lang="This application is a division of _____"><country>*cc* </country>
<continuity-data><parent> <this-application-is-a/> <continuation-in-part-of/>	<us-continuity-type sequence="*n*" values="CIP"><us-relation><parent><document-id lang="This application is a continuation-in-part of _____"> <country>*cc* </country>
<continuity-data><parent> <this-application-is-a/> <a-371-of-international/>	<us-continuity-type sequence="*n*" values="NST"><us-relation><parent><document-id lang="This application is the national stage of Appl. No. PCT _____"> <country>*cc* </country>
<continuity-data><parent> <this-application-is-a/> <non-provisional-of-provisional/>	<us-continuity-type sequence="*n*" values="PRO"><us-relation><parent><document-id lang="This application claims benefit under 35 U.S.C. 119(e) of U.S. provisional application No. 60/_____"><country>*cc*</country>
<continuity-data><parent> <this-application-is-a/> <substitution-for/>	<us-continuity-type sequence="*n*" values="SUB"><us-relation><parent><document-id lang="This application is a substitute for application No. _____"> <country>*cc*</country>
<which-is-a/>	----------
<parent>	<parent> *(see above)*
----------	<child>
<application-reference>	----------

<document-id>	<document-id> *(see above)*
<doc-number>	<doc-number>
<kind-code>	<kind>
<document-date>	<date>
<country-code>	<country> *(see above)*
<status-phrase>	<parent-status>
<patent-reference>	<parent-grant-document>

categories of bibliographic "Related U.S. Application Data":

(A) With respect to a continuation, divisional, or continuation-in-part relationship, the prior related application may be:

(1) a U.S. nonprovisional parent (for example, division of application No. 10/123,123);

(2) an international (PCT) application which designated the U.S. and which under U.S. law is treated as a U.S. nonprovisional parent (for example, continuation-in-part of application No. PCT/DE99/12345);

(3) a U.S. nonprovisional parent that itself was the U.S. National Stage of an international (PCT) application (for example, continuation of application No. 10/321,321, filed as application No. PCT/JP99/54321).

(B) The application being published may claim benefit under 35 U.S.C. 119(e) from one or more prior U.S. provisional applications.

(C) The application may be a substitute for a prior U.S. nonprovisional application.

Primary BIB source or EFS non-ICE source:

When present in Primary BIB or EFS non-ICE, the related U.S. application data (continuity data and/or provisional application data) will be captured from the `<continuity-information><continuity-data>`.

In the source each `<document-date>` will appear as an eight-position number, with the first four positions consisting of the year, the fifth and sixth positions consisting of the month [`01` through `12`], and the seventh and eighth positions consisting of the day [`01` through `31`].

example (Primary BIB) --- U.S. nonprovisional parentage:

```
<continuity-information>
   <continuity-data>
      <parent>
```

```
            <this application is a/>
            <division-of/>
            <application-reference>
               <document-id>
                  <doc-number>09000000</doc-number>
                  <document-date>1998-01-16</document-date>
                  <country-code>US</country-code>
               </document-id>
            </application-reference>
            <status-phrase>GRANTED</status-phrase>
            <patent-reference>
               <document-id>
                  <doc-number>6999999</doc-number>
                  <kind-code>A</kind-code>
                  <country-code>US</country-code>
               </document-id>
            </patent-reference>
         </parent>
         <parent>
            <which-is-a/>
            <continuation-of/>
            <application-reference>
               <document-id>
                  <doc-number>08000000</doc-number>
                  <kind-code>00</kind-code>
                  <document-date>1993-08-03</document-date>
                  <country-code>US</country-code>
               </document-id>
            </application-reference>
            <status-phrase>ABANDONED</status-phrase>
         </parent>
      </continuity-data>
   </continuity-information>
```

If the Primary BIB source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Division of application No. 09/000,000, filed on Jan. 16, 1998, now Pat. No. 6,999,999, which is a continuation of application No. 08/000,000, filed on Aug. 3, 1993, now abandoned.

example (Primary BIB) – U.S. nonprovisional parentage:

```
<continuity-information>
   <continuity-data>
      <parent>
         <this application is a/>
         <continuation-of/>
         <application-reference>
            <document-id>
               <doc-number>08003389</doc-number>
               <document-date>1999-01-12</document-date>
            </document-id>
         </application-reference>
         <status-phrase>ABANDONED</status-phrase>
      </parent>
```

```
      <parent>
         <which-is-a/>
         <continuation-in-part-of/>
         <application-reference>
            <document-id>
               <doc-number>07654226</doc-number>
               <document-date>1991-02-12</document date>
            </document-id>
         </application-reference>
         <status-phrase>ABANDONED</status-phrase>
      </parent>
      <parent>
         <this-application-is-a/>
         <continuation-in-part-of/>
         <application-reference>
            <document-id>
               <doc-number>08101283</doc-number>
               <document-date>1993-08-03</document-date>
            </document-id>
         </application-reference>
         <status-phrase>ABANDONED</status-phrase>
      </parent>
      <parent>
         <which-is-a/>
         <continuation of/>
         <application-reference>
            <document-id>
               <doc-number>07654226</doc-number>
               <document-date>1991-02-12</document-date>
            </document-id>
         </application-reference>
         <status-phrase>ABANDONED</status-phrase>
      </parent>
      <parent>
         <this application-is-a/>
         <continuation-in-part-of/>
         <application-reference>
            <document-id>
               <doc-number>PCT/JP94/00679</doc-number>
               <document-date>1994-01-12</document-date>
            </document-id>
         </application-reference>
      </parent>
   </continuity-data>
</continuity-information>
```

If the Primary BIB source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Continuation-in-part of application No. 08/003,389, filed Jan. 12, 1993, now abandoned, which is a continuation-in-part of application No. 07/654,226, filed on Feb. 12, 1991, now abandoned.
>
> Continuation-in-part of application No. 08/101,283, filed on Aug. 3, 1993, now abandoned, which is a continuation of application No. 07/654,226, filed on

Feb. 12, 1991, now abandoned.

Continuation-in-part of application No. PCT/JP94/-
00679, filed on Jan. 12, 1994.

example (Primary BIB) -- PCT application as U.S. nonprovisional parent:

```
<continuity-information>
   <continuity-data>
      <parent>
         <this application is a/>
         <continuation-of/>
         <application-reference>
            <document-id>
               <doc-number>PCT/CA99/00000</doc-number>
               <kind-code>00</kind-code>
               <document-date>1999-03-11</document-date>
               <country-code>WO</country-code>
            </document-id>
         </application-reference>
         <status-phrase>ABANDONED</status-phrase>
      </parent>
   </continuity-data>
</continuity-information>
```

If the source showed the above data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

Continuation of application No. PCT/CA99/00000,
filed on Mar. 11, 1999, now abandoned.

example (EFS non-ICE) -- U.S. nonprovisional parent was PCT National Stage:

```
<continuity-information label="[Continuity Information:]">
   <continuity-data label="[Continuity Data:]"> id="continuity-
   data">
      <parent>
         <this-application-is-a label="This application is a"/>
         <continuation-in-part-of label="continuation-in-part-of"/>
         <application-reference>
            <document-id>
               <doc-number label="[Doc Number:]">09/000000</doc-
               number>
               <document-date label="[Document Date:]">1999-10-10
               </document-date>
               <country-code label="[Country Code:]">US</country-
               code>
            </document-id>
         </application-reference>
         <status-phrase label="[Status Phrase:]">pending</status-
         phrase>
      </parent>
      <parent>
         <which-is-a label="which is a"/>
         <a-371-of-international label="a-371-of-international/">
         <application-reference>
            <document-id>
```

```
                <doc-number label="[Doc Number]">PCT/FR98/00000</doc-
                number>
                <document-date label="[Document Date:]">1998-02-02
                </document-date>
                <country-code label="[Country Code:]">WO</country-
                code>
             </document-id>
          </application-reference>
       </parent>
    </continuity-data>
</continuity-information>
```

If the EFS non-ICE source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Continuation-in-part of application No. 09/000,000, filed as application No. PCT/FR98/00000 on Feb. 2, 1998.

In the above example, the prior related U.S. application, after being identified by its U.S. application number, is further identified as having been the U.S. National Stage under 35 U.S.C. 371 of an international (PCT) application. Since the U.S. application and the international application are two stages of the same application, the application's operative filing date is the international filing date, and so the parent application's U.S. "filing date" is not captured for the composed front page.

example (Primary BIB) -- prior U.S. provisional:

```
<continuity-information>
   <continuity-data>
      <parent>
         <this application is a/>
         <non-provisional-of-provisional/>
         <application-reference>
            <document-id>
               <doc-number>60654321</doc-number>
               <document-date>2001-10-09</document-date>
               <country-code>US</country-code>
            </document-id>
         </application-reference>
      </parent>
   </continuity-data>
</continuity-information>
```

If the source showed the preceding data, the prior provisional application number and filing date would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

> Provisional application No. 60/654,321, filed on Oct. 9, 2001

example (EFS non-ICE) -- prior U.S. provisionals:

```
<continuity-information label="[Continuity Information:]">
   <continuity-data label="[Continuity Data:]" id="continuity-data">
      <parent>
```

```
            <this-application-is-a label="This application is a"/>
            <non-provisional-of-provisional label="non-provisional of
            provisional"/>
            <application-reference>
               <document-id>
                  <doc-number label="[Doc Number:]">60123123</doc-
                  number>
                  <document-date label="[Document Date:]">2000-04-10
                  </document-date>
                  <country-code label="[Country Code:]">US</country-
                  code>
               </document-id>
            </application-reference>
            <status-phrase label="[Status Phrase:]">pending</status-
            phrase>
         </parent>
         <parent>
            <this-application-is-a label="This application is a"/>
            <non-provisional-of-provisional label="non-provisional-of-
            provisional"/>
            <application-reference>
               <document-id>
                  <doc-number label="[Doc Number:]">60100100</doc-
                  number>
                  <document-date label="[Document Date:]">2000-01-09
                  </document-date>
                  <country-code label="[Country Code:]">US</country-
                  code>
               </document-id>
            </application-reference>
            <status-phrase label="[Status Phrase:]">pending</status-
            phrase>
         </parent>
      </continuity-data>
   </continuity-information>
```

If the EFS non-ICE source showed the above data, the two prior provisional application numbers and filing dates would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

> Provisional application No. 60/123,123, filed on Apr. 10, 2000. Provisional application No. 60/100,100, filed on Jan. 9, 2000.

example (Primary BIB) -- U.S. nonprovisional parent + prior U.S. provisional:

```
<continuity-information>
   <continuity-data>
      <parent>
         <this-application-is-a/>
         <division-of/>
         <application-reference>
            <document-id>
               <doc-number>10999999</doc-number>
               <document-date>2003-02-11</document-date>
               <country-code>US</country-code>
            </document-id>
```

```
         </application-reference>
         <status-phrase>granted</status-phrase>
         <patent-reference>
            <document-id>
               <doc-number>7777777</doc-number>
               <document-date>2004-05-04</document-date>
               <kind-code>B2</kind-code>
               <country-code>US</country-code>
         </parent>
      <parent>
         <this-application-is-a/>
         <non-provisional-of-provisional/>
         <application-reference>
            <document-id>
               <doc-number>60888888</doc-number>
               <document-date>2002-02-15</document-date>
               <country-code>US</country-code>
               <status-phrase>expired</status-phrase>
            </document-id>
         </application-reference>
      </parent>
   </continuity-data>
</continuity-informaton>
```

If the Primary BIB source showed the preceding data, the information would be shown as follows on the composed front page (see under **Composition** for INID codes, etc.):

Division of application No. 10/999,999, filed on
Feb. 11, 2003, now Pat. No. 7,777,777.

Provisional application No. 60/888,888, filed on
Feb. 15, 2002.

example (Primary BIB) -- substitute for prior U.S. nonprovisional:

```
<continuity-information>
   <continuity-data>
      <parent>
         <this application is a />
         <substitution-for/>
         <application-reference>
               <document-id>
                     <doc-number>10000000</doc-number>
                     <document-date>2001-09-15</document-date>
                     <country-code>US</country-code>
               </document-id>
         </application reference>
         <status-phrase>ABANDONED</status phrase>
      </parent>
   </continuity-data>
</continuity-information>
```

If the Primary BIB source showed the above data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

Substitute for application No. 10/000,000, filed

on Sep. 15, 2001, now abandoned.

"This is a 371 of" information when the application being published (as opposed to a parent) is the U.S. National Stage of a PCT application. If the Primary BIB or EFS non-ICE source should show <continuity-data> with the following tagging:

```
<this application is a />
<a-371-of-international/>
```

the application being published is the U.S. National Stage under 35 U.S.C. 371 of an international PCT application.

- When the application being processed for publication is such a National Stage application, its National Stage status is not to be shown in the composed front page's bibliographic **Related U.S. Application Data**. Instead, its National Stage status is to be indicated in the composed front page by means of the data at INID (22), INID (86), and INID (87). See ***U.S. National Stage of Patent Cooperation Treaty Data – INID (86) and (87)***. The usual source for the PCT Filing Date [INID (22)], the PCT application number [INID (86)], and the PCT publication information [INID (87)] is the <international-conventions> block of the Supplemental BIB source. However, in ***U.S. National Stage of Patent Cooperation Treaty Data – INID (86) and (87)*** see under the heading ***secondary source for National Stage data*** .

- For example:

```
<continuity-information>
   <continuity-data>
      <parent>
         <this application is a/>
         <a-371-of-international/>
         <application-reference>
            <document-id>
               <doc-number>PCT/JP99/000000</doc-number>
               <document-date>1999-09-15</document-date>
               <country-code>WO</country-code>
            </document-id>
         </application-reference>
      </parent>
   </continuity-data>
</continuity-information>
```

  If the above data appeared in the Primary BIB source, none of it would be captured as **Related U.S. Application Data**. for the composed front page.

when Primary BIB exceeds PALM storage limit. With respect to a given application, the PALM system has a limit of approximately four hundred (400) continuity data records. In some instances the PALM system may not be able to store the entirety of an application's continuity data, and thus the Primary BIB source will not provide all of the continuity data.

- The Pre-Grant Publication Division will alert the publication database contractor whenever such an application is being exported for publication processing.

- In such an instance the entirety of the continuity data will appear either in the PACR image of the Application Data Sheet (ADS) [see ***Section I. OVERVIEW OF DATA PREPARATION***, under **A. Data Sources**] or in the PACR image of the specification's "first sentence"

reference to prior related applications [see ***Section V. SPECIFICATION AND CLAIMS***, under **"First Sentence" Specific Reference to Prior Related Application(s)**].

- Where the publication database contractor is informed that the Primary BIB source is not complete because all of the records could not be stored in the Primary BIB source, the publication database contractor will use either the PACR image of the ADS or the PACR image of the "first sentence" of the specification as the source for the capture of the portion of the INID (60, 62, 63, 66) data that is not provided in the Primary BIB source.

EFS ICE 5.1 source:

When present in EFS ICE 5.1, the related U.S. application data (continuity data and/or provisional application data) will be captured from the `<us-continuity-claims>` block.

The `<us-continuity-type>` value should be CON, DIV, CIP, PRO, NST, or SUB. The publication database contractor will submit a QUERY to the PGPub Division if some other value should be present (such as REI, REX, or CVR).

In the source each `<date>` will appear as an eight-position number, with the first four positions consisting of the year, the fifth and sixth positions consisting of the month [`01` through `12`], and the seventh and eighth positions consisting of the day [`01` through `31`].

Except in <us-continuity-type sequence> "1" (where the child is the application being published), EFS ICE 5.1 <us-continuity-claims> will show a block of <child> data after each block of <parent> data.

example (EFS ICE 5.1) -- U.S. nonprovisional parentage:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="DIV">
      <us-relation>
         <parent>
            <document-id lang="This application is a division of
            10/999,999">
            <country>US</country>
            <doc-number>10/999,999</doc-number>
            <date>20031111</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Division of application No. 10/999,999, filed on
> Nov. 11, 2003.

example (EFS ICE 5.1) -- U.S. nonprovisional parentage:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="CON">
```

```
      <us-relation>
         <parent>
            <document-id lang="This application is a continuation of
            application 10/123,123">
            <country>US</country>
            <doc-number>10/123,123</doc-number>
            <date>20030103</date>
            </document-id>
            <parent-grant-document>
               <document-id>
                  <country>US</country>
                  <doc-number>7,654,321</doc-number>
                  <date>20040330</date>
               </document-id>
            </parent-grant-document>
         </parent>
      </us-relation>
   </us-continuity-type>
   <us-continuity-type sequence="2" values="CIP">
      <us-relation>
         <parent>
            <document-id lang="Said application 10/123,123 is a
            continuation-in-part of application 09/777,777">
            <country>US</country>
            <doc-number>09/777,777</doc-number>
            <date>20020514</date>
            </document-id>
            <parent-status>abandoned</parent-status>
         </parent>
         <child>
            <document-id>
               <country>US</country>
               <doc-number>10/123,123</doc-number>
            <date>20030103</date>
         </document-id>
      </child>
   </us-relation>
   </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, , the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Continuation of application No. 10/123,123, filed on Jan. 3, 2003, now Pat. No. 7,654,321, which is a continuation-in-part of application No. 09/777,-777, filed on May 14, 2002, now abandoned.

example (EFS ICE 5.1) -- U.S. nonprovisional parentage with primary chain (this application is a CON of A, which is a CON of B, which is a CIP of C) plus a secondary chain (said B is a CIP of Y, which is a CIP of Z):

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="CON">
      <us-relation>
         <parent>
```

```
            <document-id lang="This application is a continuation
            of 09/866,398">
               <country>US</country>
               <doc-number>09/866,398</doc-number>
               <date>20010525</date>
            </document-id>
         <parent-grant-document>
            <document-id>
               <country>US</country>
               <doc-number>6,416,208</doc-number>
               <date>20020709</date>
            </document-id>
         </parent-grant-document>
         </parent>
      </us-relation>
   </us-continuity-type>
   <us-continuity-type sequence="2" values="CON">
      <us-relation>
         <parent>
            <document-id lang="Said 09/866,398 is a continuation of
            09/335,010">
               <country>US</country>
               <doc-number>098/335,010</doc-number>
               <date>19990617</date>
            </document-id>
         <parent-grant-document>
            <document-id>
               <country>US</country>
               <doc-number>6,276,821</doc-number>
               <date>20010821</date>
            </document-id>
         </parent-grant-document>
         </parent>
         <child>
            <document-id>
               <country>US</country>
               <doc-number>09/866,398</doc-number>
               <date>20010525</date>
            </document-id>
         </child>
      </us-relation>
   </us-continuity-type>
   <us-continuity-type sequence="3" values="CIP">
      <us-relation>
         <parent>
            <document-id lang="Said 09/335,010 is a continuation-in-
            part of 09/102,414">
               <country>US</country>
               <doc-number>09/102,414</doc-number>
               <date>19980622</date>
            </document-id>
         <parent-grant-document>
            <document-id>
               <country>US</country>
               <doc-number>6,176,602</doc-number>
               <date>20010123</date>
            </document-id>
```

```
      </parent-grant-document>
      </parent>
      <child>
         <document-id>
            <country>US</country>
            <doc-number>09/335,010</doc-number>
            <date>19990617</date>
         </document-id>
      </child>
   </us-relation>
</us-continuity-type>
<us-continuity-type sequence="4" values="CIP">
   <us-relation>
      <parent>
         <document-id lang="Said 09/335,010 is a continuation-in-
         part of 08/687,628">
            <country>US</country>
            <doc-number>08/687,628</doc-number>
            <date>19960726</date>
         </document-id>
      <parent-grant-document>
         <document-id>
            <country>US</country>
            <doc-number>5,823,654</doc-number>
            <date>19981020</date>
         </document-id>
      </parent-grant-document>
      </parent>
      <child>
         <document-id>
            <country>US</country>
            <doc-number>09/335,010</doc-number>
            <date>19990617</date>
         </document-id>
      </child>
   </us-relation>
</us-continuity-type>
<us-continuity-type sequence="5" values="CIP">
   <us-relation>
      <parent>
         <document-id lang="Said 08/687,628 is a continuation-in-
         part of 08/607,284">
            <country>US</country>
            <doc-number>08/607,284</doc-number>
            <date>19960226</date>
         </document-id>
      <parent-grant-document>
         <document-id>
            <country>US</country>
            <doc-number>5,669,704</doc-number>
            <date>19970923</date>
         </document-id>
      </parent-grant-document>
      </parent>
      <child>
         <document-id>
```

```
                <country>US</country>
                <doc-number>08/687,628</date>
                <date>19960726</date>
             </document-id>
          </child>
       </us-relation>
    </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, , the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Continuation of application No. 09/866,398, filed on May 25, 2001, now Pat. No. 6,416,208, which is a continuation of application No. 09/335,010, filed on Jun. 17, 1999, now Pat. No. 6,276,821, which is a continuation-in-part of application No. 09/102,414, filed on Jun. 22, 1998, now Pat. No. 6,176,602.
>
> Said application No. 09/335,010 is a continuation-in-part of application No. 08/687,628, filed on Jul. 26, 1996, now Pat. No. 5,823,654, which is a continuation-in-part of application No. 08/607,284, filed on Feb. 26, 1996, now Pat. No. 5,669,704.

example (EFS ICE 5.1) -- PCT application as U.S. nonprovisional parent:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="DIV">
      <us-relation>
         <parent>
            <document-id lang="This application is a division of
            PCT/GB01/12345">
            <country>WO</country>
            <doc-number>PCT/GB01/12345</doc-number>
            <date>20011214</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, , the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Division of application No. PCT/GB01/12345, filed on Dec. 14, 2001.

example (EFS ICE 5.1) -- U.S. nonprovisional parent was PCT National Stage:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="CON">
      <us-relation>
         <parent>
```

```
            <document-id lang="This application is a continuation of
            10/123,456">
            <country>US</country>
            <doc-number>10/123,456</doc-number>
            <date>20021010</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
   <us-continuity-type sequence="2" values="NST">
      <us-relation>
         <parent>
            <document-id lang="Said application 10/123,456 is the
            U.S. national stage of PCT/FR01/99999">
            <country>WO</country>
            <doc-number>PCT/FR01/99999</doc-number>
            <date>20010202</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
         <child>
            <document-id>
               <country>US</country>
               <doc-number>10/123,456</doc-number>
               <date>20021010</date>
            </document-id>
         </child>
      </us-relation>
   </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, , the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Continuation of application No. 10/123,456,
> filed as application No. PCT/FR01/99999 on
> Feb. 2, 2001.

example (EFS ICE 5.1) -- prior U.S. provisional:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="PRO">
      <us-relation>
         <parent>
            <document-id lang="This application claims benefit under
            35 U.S.C. 119(e) of 60/987,654">
            <country>US</country>
            <doc-number>60/987,654</doc-number>
            <date>20031231</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

Provisional application No. 60/987,654, filed
Dec. 31, 2003.

example (EFS ICE 5.1) -- U.S. nonprovisional parent + prior U.S. provisionals:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="CON">
      <us-relation>
         <parent>
            <document-id lang="This application is a continuation of
            10/000,000">
            <country>US</country>
            <doc-number>10/000,000</doc-number>
            <date>20030721</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
   <us-continuity-type sequence="2" values="PRO">
      <us-relation>
         <parent>
            <document-id lang="Said 10/000,000 was a non-provisional
            of provisional 60/888,890">
            <country>US</country>
            <doc-number>60/888,890</doc-number>
            <date>20020715</date>
            </document-id>
            <parent-status>expired</parent-status>
         </parent>
         <child>
            <document-id>
               <country>US</country>
               <doc-number>10/000,000</doc-number>
               <date>20030721</date>
            </document-id>
         </child>
      </us-relation>
   </us-continuity-type>
   <us-continuity-type sequence="3" values="PRO">
      <us-relation>
         <parent>
            <document-id lang="Said 10/000,000 was a non-provisional
            of provisional 60/888,889">
            <country>US</country>
            <doc-number>60/888,889</doc-number>
            <date>20020715</date>
            </document-id>
            <parent-status>expired</parent-status>
         </parent>
         <child>
            <document-id>
               <country>US</country>
```

```
                <doc-number>10/000,000</doc-number>
                <date>20030721</date>
             </document-id>
          </child>
       </us-relation>
    </us-continuity-type>
    <us-continuity-type sequence="4" values="PRO">
       <us-relation>
          <parent>
             <document-id lang="Said 10/000,000 was a non-provisional
             of provisional 60/888,888">
             <country>US</country>
             <doc-number>60/888,888</doc-number>
             <date>20020715</date>
             </document-id>
             <parent-status>expired</parent-status>
          </parent>
          <child>
             <document-id>
                <country>US</country>
                <doc-number>10/000,000</doc-number>
                <date>20030721</date>
             </document-id>
          </child>
       </us-relation>
    </us-continuity-type>
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Continuation of application No. 10/000,000, filed on Jul. 21, 2003.
>
> Provisional application No. 60/888,890, filed on Jul. 15, 2002. Provisional application No. 60/-888,889, filed on Jul. 15, 2002. Provisional application No. 60/888,888, filed on Jul. 15, 2002.

example (EFS ICE 5.1) -- substitute for prior U.S. nonprovisional:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="SUB">
      <us-relation>
         <parent>
            <document-id lang="This application is a substitute for
            10/010,010">
            <country>US</country>
            <doc-number>10/010,010</doc-number>
            <date>20020806</date>
            </document-id>
            <parent-status>abandoned</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
```

```
</us-continuity-claims>
```

If the EFS ICE 5.1 source showed the preceding data, the following would be shown on the composed front page (see under **Composition** for INID codes, etc.):

> Substitute for application No. 10/000,000, filed
> on Aug. 6, 2003, now abandoned.

when EFS ICE 5.1 source shows the application being published as the "NST" (National Stage) of a PCT application. If the EFS ICE 5.1 source should show <us-continuity-claims> in which <us-continuity-type sequence="1"> has been given the value "NST," then the application being published is the U.S. National Stage under 35 U.S.C. 371 of an international PCT application.

- When the application being processed for publication is such a National Stage application, its National Stage status is not to be shown in the composed front page's bibliographic **Related U.S. Application Data**. Instead, its National Stage status is to be indicated on the composed front page by means of the data at INID (22), INID (86), and INID (87). See ***U.S. National Stage of Patent Cooperation Treaty Data – INID (86) and (87)***. The usual source for the PCT Filing Date [INID (22)], the PCT application number [INID (86)], and the PCT publication information [INID (87)] is the <international-conventions> block of the Supplemental BIB source. However, in ***U.S. National Stage of Patent Cooperation Treaty Data – INID (86) and (87)*** see under the heading ***secondary source for National Stage data*** .

- For example:

```
<us-continuity-claims>
   <us-continuity-type sequence="1" values="NST">
      <us-relation>
         <parent>
            <document-id lang="This application is the U.S.
            national stage under 35 U.S.C. 371 of
            PCT/GB01/98765">
            <country>WO</country>
            <doc=number>PCT/GB01/98765</doc-number>
            <date>20010618</date>
            </document-id>
            <parent-status>pending</parent-status>
         </parent>
      </us-relation>
   </us-continuity-type>
</us-continuity-claims>
```

If the above data appeared in the EFS ICE 5.1 source, none of it would be captured as **Related U.S. Application Data** for the composed front page. In the above example, the National Stage data should be present in the <international-conventions> block of the Supplemental BIB source. Otherwise, as mentioned previously, see under the heading ***secondary source for National Stage data***.

EXCEPTION TO "Primary BIB" AS SOURCE FOR RELATED U.S. APPLICATION DATA EXCEEDING "Primary BIB" STORAGE LIMIT

With respect to a given application, the PALM system has a limit of approximately four hundred (400) continuity data records. In some instances the PALM system may not be able to store the entirety of an application's continuity data, and thus the Primary BIB source will not provide all of the continuity data.

The Pre-Grant Publication Division will alert the publication database contractor whenever such an application is being exported for publication processing.

In such an instance the entirety of the continuity data will appear either in the PACR image of the Application Data Sheet (ADS) [see ***Section I. OVERVIEW OF DATA PREPARATION***, under **A. Data Sources**] or in the PACR image of the specification's "first sentence" reference to prior related applications [see ***Section V. SPECIFICATION AND CLAIMS***, under **"First Sentence" Specific Reference to Prior Related Application(s)**].

Where the publication database contractor is informed that the Primary BIB source is not complete because all of the records could not be stored in the Primary BIB source, the publication database contractor will use either the PACR image of the ADS or the PACR image of the "first sentence" of the specification as the source for the capture of the portion of the INID (60, 62, 63, 66) data that is not provided in the Primary BIB source.

Pre-Capture Verification

The `<continuity-information>` provided by the USPTO sometimes leads to parsing errors, especially when the `<continuity-information>` includes `<non-provisional-of-provisional/>` data. The publication database contractor will correct such parsing errors in accordance with the following guidelines:

1. The first content model should always start with `<this-application-is-a/>`.

2. When the application being published claims benefit from a prior provisional application, the `<non-provisional-of-provisional/>` tag should be preceded by a `<this-application-is-a/>` tag. See Example I below.

3. When the application being published has a nonprovisional parent and the nonprovisional parent claims benefit from a prior provisional application, the `<non-provisional-of-provisional/>` tag should be preceded by a `<which-is-a/>` tag. See Example II below.

4. A <which-is-a/> content model should not be preceded by a <this-application-is-a/><non-provisional-of-provisional/> content model or by a <which-is-a/><non-provisional-of-provisional> content model. See Examples I and II below.

Example I

The application being published is a continuation-in-part of 09/222,222 and, in addition, claims benefit from (is a nonprovisional of provisional of) 60/111,111.

NOTE: In what follows, many tags and items of data,such as <continuity-data>, <parent>, <application-reference>, <document-id>, <document-date>, <country-code>, and <status-phrase>,are not shown.

■ PALM Bib source's version

```
<this-application-is-a/>
<nonprovisional-of-provisional/>
   <doc-number>60111111</doc-number>

<which-is-a/>
<continuation-in-part-of/>
   <doc-number>09222222</doc-number>
```

■ corrected source version

```
<this-application-is-a/>
<continuation-in-part-of/>
   <doc-number>09222222</doc-number>

<this-application-is-a/>
<nonprovisional-of-provisional/>
   <doc-number>60111111</doc-number>
```

■ Application Yellow Book's version

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/222,222, filed on …

(60) Provisional application No. 60/111,111, filed on …

Alternatively, the two <this-application-is-a/> content models could switch positions in the order.

Example II

The application being published is a continuation-in-part of 09/666,666 and, in addition, claims benefit from (is a nonprovisional of provisional of) 60/555,555. The parent application 09/666,666 claims benefit from (is a nonprovisional of provisional of) 60/444,444.

NOTE: In what follows, many tags and items of data,such as <continuity-data>, <parent>, <application-reference>, <document-id>, <document-date>, <country-code>, and <status-phrase>, are not shown.

■ PALM Bib source's version

```
<this-application-is-a/>
<nonprovisional-of-provisional/>
   <doc-number>60555555</doc-number>

<which-is-a/>
<continuation-in-part-of/>
   <doc-number>09666666</doc-number>

<which-is-a/>
<nonprovisional-of-provisional/>
   <doc-number>60444444</doc-number>
```

■ corrected source version

```
<this-application-is-a/>
<nonprovisional-of-provisional/>
   <doc-number>60555555</doc-number>

<this-application is-a/>
<continuation-in-part-of/>
   <doc-number>09666666</doc-number>

<which-is-a/>
<nonprovisional-of-provisional/>
   <doc-number>60444444</doc-number>
```

■ Application Yellow Book's version

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/666,666, filed on …

(60) Provisional application No. 60/555,555, filed on …
Provisional application No. 60/444,444, filed on …

Alternatively, the first content model (<this-application-is-a/><nonprovisional-of-provisional/>) could be third in the order.

Composition

Location

When present, **Related U.S. Application Data** will be shown in accordance with the following order:

- U.S.-national-stage-of-PCT data [*if present*]
- **Prior Publication Data** [*if present*]
- **Related U.S. Application Data** [*if present*]
- **Foreign Priority Data** [*if present*]
- INID (51) data [*required*]

Style

The INID codes identified below will be used for **Related U.S. Application Data**:

(60) to be used for any combination of division plus continuation and/or continuation-in-part, and the prior applications are nonprovisional

(62) to be used when there is one solely divisional relationship or when all the relationships are divisional, and the prior application(s) are nonprovisional

(63) to be used for continuation and/or continuation-in-part, and the prior application(s) are nonprovisional

(66) to be used if the application at hand is a substitution for a prior application

(60) provisional application data

The **Related U.S. Application Data** is to be presented in the following order:

- continuation/divisional/continuation-in-part data: When this data is present, code (60) or code (62) or code (63) will be used.
- provisional application data: If INID code (60) is used for data about prior nonprovisional applications and there is also data about prior provisional application(s), a second INID code (60) will be used for the data about prior provisional applications.
- substitution data

U.S. application numbers will be shown as a two-digit series code, followed by a diagonal mark, followed by a six-digit sequential number with leading zeroes and a comma between the third and fourth digits. For example:

08/999,999
09/000,001
60/090,090

PCT application numbers will be shown as the letters PCT, followed by a diagonal mark, followed by a two-character country code, followed by a two-digit year, followed by a diagonal mark, followed by a five-digit sequential number. For example:

PCT/JP01/00111
PCT/GB99/08888

- The heading **Related U.S. Application Data** is shown as follows:
  - 9-point
  - Times New Roman Bold
  - uppercase and lowercase
  - centered in the column
  - avoid widow heading wherever possible

- Each INID code (see above) is shown as follows:
  - 9-point
  - Times New Roman

- The data itself ,document numbers, dates, statuses, connective wording,is shown as follows:
  - 8-point
  - Times New Roman
  - uppercase and lowercase
  - block paragraph style
  - months abbreviated as follows:

Jan.	Feb.	Mar.	Apr.	May	Jun.
Jul.	Aug.	Sep.	Oct.	Nov.	Dec.

  - List multiple entries according to the filing dates of the respective applications, in inverse chronological order (that is, the most recently filed parents will appear first).
  - The phrase Provisional application No. will precede each U.S. provisional application number:

    Provisional application No. 60/000,001 . . .

  - The phrase application No. will precede each U.S. nonprovisional application number and each PCT application number. For example:

    . . . application No. 09/123,123 . . .
    . . . application No. PCT/CA01/12121 . . .

  - The phrase filed on will precede each filing date. For example:

. . . filed on Apr. 17, 2000 . . .

- When a prior U.S. application was a "National Stage" PCT application, the phrase filed as will precede the PCT application number and the word on will precede the PCT filing date. For example:

  . . . filed as PCT/DE01/12345 on Mar. 2, 2001 . . .

- Use the following styles [including the word now] for statuses:

  , now Pat. No.

  , now abandoned

  , now SIR No.

  NOTE: The status "pending" is not shown in the photocomposed data.

- The status (whether "pending" or "abandoned") of a provisional application is **not** to be shown. Terms such as "continuation" and "division" and "continuation-in-part" are **not** to be shown in data about provisional applications.

- The data will be presented as one or more "sentences." A "sentence" in this context is defined as a chain of relationships beginning with the implied words "This application being published is a" or a chain of relationships beginning with the actual word "Said." The first word of each "sentence",that is, **Continuation** or **Continuation-in-part** or **Division** or **Said,**is to be capitalized, and each "sentence" is to end with a period. Each "sentence" is to begin on a new line. For example:

  Continuation of application No. 09/000,000, filed on Jan. 20, 2001, now abandoned, which is a continuation of application No. 09/000,000, filed on Oct. 10, 2000, now abandoned, which is a continuation of application No. 09/000,000, filed on Apr. 3, 2000, now abandoned.
  Continuation-in-part of application No. 09/000,-000, which was filed as PCT/JP99/00000 on Mar. 17, 1999, now abandoned.
  Said application No. 09/000,000 is a division of application No. 09/000,000, filed on May 10, 1999, now abandoned.

Example(s)

continuation of prior U.S. application

Related U.S. Application Data

(63) Continuation of application No. 08/000,000, filed on Mar. 22, 1994, now abandoned.

division of prior U.S. application

Related U.S. Application Data

(62) Division of application No. 08/000,000, filed on Jan. 10, 1995, now abandoned.

continuation of prior international (PCT) application

Related U.S. Application Data

(63) Continuation of application No. PCT/JP95/-00000, filed on Jan. 22, 1995, now abandoned.

division of prior U.S. application, which was National Stage of international (PCT) application

Related U.S. Application Data

(62) Division of application No. 08/000,000, filed as application No. PCT/JP93/00000 on Oct. 5, 1993, now abandoned.

provisional application data

Related U.S. Application Data

(60) Provisional application No. 60/000,000, filed on Aug. 3, 1996.

division of prior U.S. application plus provisional application data

Related U.S. Application Data

(62) Division of application No. 08/000,000, filed on Nov. 20, 1996, now abandoned.

(60) Provisional application No. 60/000,000, filed on Dec. 28, 1995.

combination of division and continuation-in-part relationships, plus provisional application data

Related U.S. Application Data

(60) Division of application No. 08/000,000, filed on Nov. 20, 1996, now abandoned, which is a continuation-in-part of application No. 08/000,000, filed on Apr. 2, 1996, now abandoned.

(60) Provisional application No. 60/000,000, filed on Dec. 28, 1995.

chain involving application with multiple parents

Related U.S. Application Data

(60) Continuation of application No. 09/000,000, filed on Jan. 20, 2001, now abandoned, which is a continuation of application No. 09/000,000, filed on Oct. 10, 2000, now abandoned, which is a continuation of application No. 09/000,000, filed on Apr. 3, 2000, now abandoned.
Continuation-in-part of application No. 09/000,-000, which was filed as PCT/JP99/00000 on Mar. 17, 1999, now abandoned.
Said application No. 09/000,000 is a division of application No. 09/000,000, filed on May 10, 1999, now abandoned.

substitute application data

Related U.S. Application Data

(66) Substitute for application No. 08/000,000, filed on Aug. 9, 1997, now abandoned.

FORMATS FOR COMPOSED "Related U.S. Application Data" WHEN PROVISIONAL APPLICATION DATA IS PRESENT

- **show provisional application data in a separate block with INID code (60) [Application Yellow Book]**

On the preceding pages see the composition mockups under the heading *division of prior U.S. application plus provisional application data* and under the heading *combination of division and continuation-in-part relationships, plus provisional application data*.

Application Yellow Book's continuity data about prior non-provisional application(s) will be shown with the appropriate INID code of (60), (62), or (63), and the data about prior provisional application(s) will be shown with INID code (60). When both kinds of data are present, they will be composed in separate blocks under the heading **Related U.S. Application Data**. The continuity data block will be followed by the provisional application(s) data block, and each block will show its appropriate INID code. See the mockup at the bottom of this page.

- **show the phrase "Provisional application No." instead of the phrases "Non-provisional of provisional" and "which is a non-provisional of provisional" [Application Yellow Book]**

See the last paragraph under the heading **Provisional Application Data – Example A**, and see the last paragraph under the heading **Provisional Application Data – Example B**.

See the composition mockup under the heading *provisional application data*.

Tags such as `<this-application-is-a/><nonprovisional-of-provisional>` and `<which-is-a/><nonprovisional-of-provisional>` are used in the Primary BIB source and in Application Red Book. However, the phrases "Non-provisional of provisional" and "which is a non-provisional of provisional" will not be used in Application Yellow Book's composed version of the data. Instead, the composed data will use the phrase "Provisional application No." as shown in the mockup below:

Related U.S. Application Data

(62) Division of application No. 09/000,000, filed on Nov. 12, 2001, now abandoned.

(60) Provisional application No. 60/000,000, filed on Nov. 15, 2000. Provisional application No. 60/000,000, filed on Nov. 15, 2000. Provisional application No. 60/000,000, filed on Nov. 15, 2000. Provisional application No. 60/000,000, filed on Nov. 15, 2000.

FORMATS FOR COMPOSED "Related U.S. Application Data" WHEN U.S. PARENT WAS NATIONAL STAGE OF PCT APPLICATION

- **show the "national stage" parent's PCT filing date but do not show its U.S. filing date [Application Yellow Book]**

Under the heading **Continuity Data – Example D**, see the last sentence ("Since the U.S. application …") in the first paragraph, and see the last paragraph ("If the source showed …"). In Example D the parent application's U.S. filing date, present in the source mockup as `<document-date>1999-10-10`, is not present in the composed continuity data's wording at the end of the example.

See the composition mockup under the heading *division of prior U.S. application, which was National Stage of international (PCT) application*.

When the U.S. parent was the national stage of a PCT application, the Primary BIB source shows a U.S. `<document-date>` (filing date) that is associated with the parent's U.S. application number, and this U.S. `<document-date>` (filing date) is shown in Application Red Book. However, this `<document-date>` (filing date) associated with the parent's U.S. application number will not be shown in Application Yellow Book's composed version of the data. Instead, Application Yellow Book's composed **Related U.S. Application Data** will show the parent's international (PCT) filing date only,that is, the `<document-date>` (filing date) that is associated with the PCT application number. See the mockup at the bottom of this page.

- **show the phrase "filed as" instead of the phrase "which is a 371 of international" [Application Yellow Book]**

Tags such as `<which-is-a/><a-371-of-international>` are used in the Primary BIB source and in the Application Red Book. However, the phrase "which is a 371 of international" will not be used in Application Yellow Book's composed version of the data. Instead, the composed data will use the phrase "filed as" as shown in the mockup below.

Related U.S. Application Data

(62) Division of application No. 09/477,061, filed on Jan. 3, 1999, now Pat. No. 6,265,341, which is a division of application No. 09/068,831, filed as application No. PCT/JP97/02958 on Aug. 22, 1997, now Pat. No. 6,121,191.

COMPOSITION OF MULTI-SHEET FRONT PAGE

It may happen that an application contains so much data under **Related U.S. Applications Data** that a multi-sheet front page is necessary.

first sheet of multi-sheet front page. As much of the data as possible will be shown on the first sheet of the multi-sheet front page. When the limit is reached, the parenthetical phrase (Continued on next sheet) in 9-point Times New Roman will be centered in the last line of the section, as shown in the mockup below:

Related U.S. Application Data

(60) Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed
(Continued on next sheet)

second (or succeeding) sheet of multi-sheet front page. Each additional sheet of the multi-sheet front page will be shown as follows:

- The patent application publication number, including the code **US** and the kind code, will be centered on the top line of the page heading, in 12-point Times New Roman Bold.
- The sheet number, consisting of the word Page and the Arabic numeral, both in 9-point Times New Roman, will be centered in the second line of the page heading.
- The page heading will be separated from the rest of the page by a horizontal line extending from the left margin to the right margin.
- The additional data will be shown in columns, with the same indentations that were used on the first sheet of the multi-sheet front page. The section heading **Related U.S. Applications Data** in 9-point Times New Roman Bold will be shown in the first line of the first column of each second (or succeeding) sheet.

See the mockup on the next page:

Related U.S. Application Data

on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000, provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000 Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000. Provisional application No. 60/000,000, filed on Dec. 14, 2000.

Foreign Application Priority Data – INID (30)

Data Source

tags in source:

Primary BIB & EFS non-ICE	***EFS ICE 5.1***
<foreign-priority-benefits>	<us-priority-claims>
<foreign-invention-claim>	<us-priority-claim>
<document-id>	----------
<doc-number>	<doc-number>
<document-date>	<date>
<country><country-code>	<country>
<priority-claimed/>	<us-priority-claimed/>
<priority-not-claimed/>	<us-priority-not-claimed>

Primary BIB source or EFS non-ICE source:

When present, foreign application priority data will be provided via the Primary BIB source or EFS non-ICE source, where the data will appear under <foreign-priority-benefits><foreign-invention-claim>.

The source will identify each foreign application by <doc-number>, by <document-date>, by <country-code>, and by a tag which says either <priority-claimed/> or <priority-not-claimed/> *OR* the source will identify each foreign application by <application-number>, by <country-code>, by <filing-date>, and by a tag which says either <priority-claimed/> or <priority-not-claimed/>.

- When the <priority-claimed/> tag appears, the foreign application data,that is, the foreign application's document number, its document filing date, and its two-character country code,will be captured.

- When the <priority-not-claimed/> tag appears, no data about the foreign application will be captured.

In the source each <document-date> will appear as an eight-position number, with the first four positions consisting of the year, the fifth and sixth positions consisting of the month [01 through 12], and the seventh and eighth positions consisting of the day [01 through 31].

example (Primary BIB):

```
<foreign-priority-benefits>
   <foreign-invention-claim>
```

```
            <document-id>
               <doc-number>996666</doc-number>
               <document-date>1999-08-19</document-date>
               <country-code>NO</country-code>
            </document-id>
            <priority-claimed/>
         </foreign-invention-claim>
         <foreign-invention-claim>
            <document-id>
               <doc-number>9955555-1</doc-number>
               <document-date>1999-08-17</document-date>
               <country-code>SE</country-code>
            </document-id>
            <priority-claimed/>
         </foreign-invention-claim>
         <foreign-invention-claim>
            <document-id>
               <doc-number>9844444-1</doc-number>
               <document-date>1998-01-19</document-date>
               <country-code>SE</country-code>
            </document-id>
            <priority-not-claimed/>
         </foreign-invention-claim>
      </foreign-priority-benefits>
```
← *fields pertaining to 984444-1 are not captured*

OR

```
      <foreign-priority-benefits>
         <foreign-invention-claim>
            <application-number>996666</application-number>
            <country><country-code>NO</country-code></country>
            <filing-date>1999-08-19</filing-date>
            <priority-claimed/>
         </foreign-invention-claim>
         <foreign-invention-claim>
            <application-number>9955555-1</application-number>
            <country><country-code>SE</country-code></country>
            <filing-date>1999-08-17</filing-date>
            <priority-claimed/>
         </foreign-invention-claim>
         <foreign-invention-claim>
            <application-number>9844444-1</application-number>
            <country><country-code>SE</country-code></country>
            <filing-date>1998-01-19</filing-date>
            <priority-not-claimed/>
         </foreign-invention-claim>
      </foreign-priority-benefits>
```
← *fields pertaining to 984444-1 are not captured*

If the Primary BIB source showed the above data, the following foreign priority data would appear on the composed front page (see under **Composition** for INID codes, etc.):

Aug. 19, 1999 (NO)……99666
Aug. 17, 1999 (SE)……..9955555-1

example (EFS non-ICE):

```
<foreign-priority-benefits label="[Foreign Priority Benefits]">
   <foreign-invention-claim>
      <foreign-application-number label="[Foreign Application
      No.:]">9709999-4</foreign-application-number>
      <country><country-code>SE</country-code></country>
      <filing-date label="[Filing Date:]">1997-12-14</filing-date>
      <priority-claimed label="[Priority Claimed]"/>
   </foreign-invention-claim>
</foreign-priority-benefits>
```

If the EFS non-ICE source showed the above data, the following foreign priority data would appear on the composed front page (see under **Composition** for INID codes, etc.):

Dec. 14, 1997 (SE).....9709999

EFS ICE 5.1 source:

When present, foreign application priority data will be provided via the EFS ICE 5.1 source, where the data will appear under `<us-priority-claims>`.

The source will identify each foreign application by `<doc-number>`, by `<country>`, by `<date>`, and by a tag which says either `<us-priority-claimed/>` or `<us-priority-not-claimed/>`.

- When the <us-priority-claimed/> tag appears, the foreign application data,that is, the foreign application's <doc-number>, its <date>, and its <country>,will be captured.

- When the `<us-priority-not-claimed/>` tag appears, no data about the foreign application will be captured.

In the source each `<date>` will appear as an eight-position number, with the first four positions consisting of the year, the fifth and sixth positions consisting of the month [`01` through `12`], and the seventh and eighth positions consisting of the day [`01` through `31`].

example (EFS ICE 5.1):

```
<us-priority-claims>
   <us-priority-claim>
      <doc-number>0009999.3</doc-number>
      <country>GB</country>
      <date>20000317</date>
      <us-priority-claimed/>
   </us-priority-claim>
   <us-priority-claim>
      <doc-number>0008888.4</doc-number>
      <country>GB</country>
      <date>20000102</date>
      <us-priority-not-claimed>   ← fields pertaining to 0008888.4 are not captured
   </us-priority-claim>
```

```
</us-priority-claims>
```

If the EFS ICE 5.1 source showed the above data, the following foreign priority data would appear on the composed front page (see under **Composition** for INID codes, etc.):

Mar. 17, 2000 (GB).....0009999.3

Pre-Capture Verification

None.

Composition

Location

When present, (30) **Foreign Application Priority Data** is to be shown in accordance with the following order:

- U.S.-national-stage-of-PCT data [*if present*]
- **Prior Publication Data** [*if present*]
- **Related U.S. Application Data** [*if present*]
- **Foreign Application Priority Data** [*if present*]

Style

The following information is shown for each foreign priority application:

- date of filing
- two-character code for country or treaty organization
- application number

- INID code (30) is shown as follows:
  - 9-point
  - Times New Roman
  - flush left on same line as heading **Foreign Application Priority Data**

- The heading **Foreign Application Priority Data** is shown as follows:
  - 9-point
  - Times New Roman Bold
  - uppercase and lowercase
  - centered in the column on same line as INID code (30)

- avoid widow heading wherever possible

- The foreign application data is to be shown as follows:

  - 8-point
  - Times New Roman
  - uppercase and lowercase
  - arranged in three columns, each aligned flush left

  filing date column:

  – Month/day/year, with month abbreviated as follows:

Jan.	Feb.	Mar.	Apr.	May	Jun.
Jul.	Aug.	Sep.	Oct.	Nov.	Dec.

  country code column:

  - two alphabetic characters within parentheses

  application number column:

  – Leader dots fill the span from the parenthetical country code to the application number.

Example(s)

(30) **Foreign Application Priority Data**

Aug. 19, 1999 (NO) ……..….. 996666
Aug. 17, 1999 (SE) ……...….. 9844444-1

International Classification Data – INID (51)

Data Source

The Supplemental BIB source will provide INID (51) international patent classification (IPC) data.

In the <classification-ipc> block, a single primary IPC tagged <classification-ipc-primary> will be provided, and one or more secondary IPCs, each tagged <classification-ipc-secondary>, may be provided. In addition, the source will provide the IPC edition number, tagged <classification-ipc-edition>.

If the <classification-ipc> block does not include a <classification-ipc-primary>, then the sole or first-listed <classification-ipc-secondary> will be captured as the primary IPC. At a minimum, each patent application publication must have a primary IPC. It is permissible to not have a secondary IPC.

A complete IPC consists of the following elements:

- uppercase alpha
- two numerics
- uppercase alpha
- space
- one to three numerics
- diagonal
- two or more numerics [NOTE: In IPC Edition 7 there may be as many as five numerics in this element, as illustrated in the fourth example below.]

For example:

B24B 31/00
A21B 3/40
G03C 1/815
G02F 1/13357

In the source, the IPC spacing may be incorrect. The database contractor is to correct it. For example:

source version of IPC ➔	E 21B23 /00
captured version of IPC ➔	E21B 23/00

An IPC edition number is a single-digit number. Edition 7 is currently operative. However, the source may show extraneous leading zeroes. The database contractor will not capture these leading zeroes. For example:

source version of edition number➔	00000000007
captured version of edition number➔	7

The following is an example of IPC data in the Supplemental BIB source:

```
<classification-ipc>
   <classification-ipc-primary>G06F 11/30</classification-ipc-
   primary>
   <classification-ipc-secondary>H04B 17/00</classification-ipc-
   secondary>
   <classification-ipc-edition>7</classification-ipc-edition>
</classification-ipc>
```

Given the source data shown above, the contractor would capture G06F 11/30 as the primary IPC and would capture H04B 17/00 as a secondary IPC.

Pre-Capture Verification

None, except that the database contractor will impose the proper spacing within each IPC.

Composition

Location

INID (51) data will always appear and will be shown in accordance with the following order:

- U.S.-national-stage-of-PCT data [*if present*]
- **Prior Publication Data** [*if present*]
- **Related U.S. Application Data** [*if present*]
- **Foreign Priority Data** [*if present*]
- INID (51) data [*required*]
- INID (52) data [*required*]

Style

The heading **Publication Classification** will be centered in the column and will introduce the INID (51) data and the INID (52) data.

The heading will be **Int. Cl.**[7] (The seventh edition of the IPC went into effect on January 1, 2000, and will be in effect for five years.)

- The heading **Publication Classification** is shown as follows:

- 9- on 10-point
- Times New Roman Bold
- uppercase and lowercase

- centered in the column
- avoid widow heading wherever possible

- INID code (51) is shown as follows:

  - 9- on 10-point
  - Times New Roman
  - flush left on same line as heading **Int. Cl.**[7]

- The heading **Int. Cl.**[7] is shown as follows:

  - 9- on 10-point
  - Times New Roman Bold
  - uppercase and lowercase

- The primary IPC code is shown as follows:

  - 9- on 10-point
  - Times New Roman Bold
  - all alphabetic characters uppercase
  - preceded by dot leaders (if omission of dot leaders occurs, at least one en- space must appear between heading and IPC code)
  - right-justified when there are no secondary IPC code(s)
  - followed by semicolon if secondary IPC code(s) are present

- Any secondary IPC code(s) are shown as follows:

  - 9- on 10-point
  - Times New Roman
  - all alphabetic characters uppercase
  - following primary IPC code, same line
  - right-justify multiple lines

- Additional instructions for IPC codes:

  - **Semicolon.** Use semicolon to separate IPC codes.

  - **Internal space.** Show a space between the second uppercase alpha and the remainder of the IPC code.

  - **Internal diagonal.** Show a diagonal between the "one to three numerics" and the "two or more numerics" in an IPC code.

  - **No internal line break.** Do not break an IPC code to overflow to a second line.

Example(s)

primary IPC code:

Publication Classification

(51) **Int. Cl.**[7]..... **B24B 31/00**

primary IPC code + secondary IPC codes:

Publication Classification

(51) **Int. Cl.**[7]..... **G03C 1/815**; F21V 7/00;
G03B 11/00; G03B 15/00; H01K 1/26

U.S. Classification Data – INID (52)

Data Source

The Supplemental BIB source will provide INID (52) U.S. classification data.

In the <classification-us> block, a single primary U.S. classification tagged <classification-us-primary> will be provided, and one or more secondary U.S. classifications, each tagged <classification-us-secondary>, may be provided.

Each U.S. classification will consist of a <uspc> block further consisting of a <class> and a <subclass>.

U.S. Classes. A utility class consists of one, two, or three numbers—for example, Class 8, Class 96, and Class 401. The sole plant class is Plt.

The Supplemental BIB source will show the utility <class> as a three-digit number with leading zeroes. The database contractor will not capture the leading zeroes. For example:

source version	***captured version***
003	3
033	33
333	333

U.S. Subclasses. A U.S. subclass may be up to six characters in length and may contain a decimal:

- up to three numerics without a decimal—for example, Subclass 1, Subclass 54, and Subclass 228
- up to three numerics before a decimal—for example, Subclass 4.1, Subclass 22.55, and Subclass 222.02
- up to three characters (numeric and/or alphabetic) after a decimal or after a space—for example, Subclass 4.1, Subclass 22.66, Subclass 174.8 E, and Subclass 170 HM
- A numbered digest (DIG + up to three digits) may appear in place of a subclass—for example, DIG. 1 and DIG. 246.
- A "foreign" collection (FOR + three digits) may appear in place of a subclass,for example, FOR 110.

- An E subclass (the letter E + up to five alphanumeric characters) may appear as the U.S. subclass. If present, the E subclass will appear in the Supplemental BIB source as the <subclass> within a secondary U.S. classification. For example:

```
<classification-us-secondary><uspc><class>257</class>
<subclass>E31112</subclass></uspc></classification-us-
secondary>
```

  This class and subclass would be published on the front page as 257/E31.112.

The Supplemental BIB source will show each <subclass> as six characters.

An implied decimal or space exists between the first set of three characters and the second set of three characters.

When the first set of three characters is all-numeric, the first set of characters will appear with leading zeroes. When the second set of three characters is all-numeric, the second set of characters will appear with trailing zeroes. When the second set of characters contains alphabetic(s), the alphabetic(s) will be appear with leading zeroes.

When the first set of three characters is all-alphabetic, leading zeroes will be used in the second set of three (numeric) characters.

In a six-character E subclass when characters four through six are all numeric, any leading zeros in characters four through six will be captured, but any trailing zeros in characters four through six will not be captured.

In a six-character E subclass when characters four through six include an alphabetic, the alphabetic will appear with leading zeros, and any such leading zeros will not be captured.

For example:

source version	***captured version***
001000	1
010000	10
258000	258
002200	2.2
00220A	2.2 A
03800B	38 B
17480E	174.8 E
222100	222.1
222020	222.02
222110	222.11
1700HM	170 HM
DIG001	DIG. 1
DIG246	DIG. 246
FOR222	FOR 222

Additional examples (E subclasses):

source version	***captured version***
E27003	E27.003
E27060	E27.06
E27073	E27.073
E27100	E27.1
E27153	E27.153
E9999A	E99.99 A
E9990B	E99.9 B
E9900C	E99 C

The following is an example of U.S. classification data in the Supplemental BIB source:

```
<classification-us>
   <classification-us-primary>
      <uspc>
         <class>290</class>
         <subclass>012000</subclass>
      </uspc>
   </classification-us-primary>
   <classification-us-secondary>
      <uspc>
         <class>290</class>
         <subclass>03700R</subclass>
      </uspc>
   </classification-us-secondary>
   <classification-us-secondary>
      <uspc>
         <class>290</class>
         <subclass>039000</subclass>
      </uspc>
   </classification-us-secondary>
   <classification-us-secondary>
      <uspc>
         <class>414</class>
         <subclass>222030</subclass>
      </uspc>
   </classification-us-secondary>
   <classification-us-secondary>
      <uspc>
         <class>414</class>
         <subclass>286000</subclass>
      </uspc>
   </classification-us-secondary>
   <classification-us-secondary>
      <uspc>
         <class>425</class>
         <subclass>DIG246</subclass>
      </uspc>
   </classification-us-secondary>
</classification-us>
```

Given the source data shown above, the following classes and subclasses would be captured:

Class	***Subclass***
290	12
290	37 R
290	39
414	222.03
414	286
425	DIG. 246

Pre-Capture Verification

None, except that the database contractor will impose the proper spacing and punctuation in the U.S. classifications that get captured.

Composition

Location

INID (52) U.S. classification data immediately follows the INID (51) international classification data.

Style

INID (52) data appears with the heading **U.S. Cl.**

- INID code (52) is shown as follows:
  - 9-point
  - Times New Roman
  - flush left on same line as heading **U.S. Cl.**
- The heading **U.S. Cl.** is shown as follows:
  - 9-point
  - Times New Roman Bold
  - uppercase and lowercase
- The U.S. primary U.S. classification is shown as follows:
  - 9-point
  - Times New Roman Bold

- all alphabetic characters uppercase
- preceded by dot leaders (if omission of dot leaders occurs, at least one en-space must appear between heading and primary U.S. classification)
- right-justified when there are no cross-references
- followed by semicolon if cross-references are present

- Any secondary U.S. classifications are shown as follows:

  - 9-point
  - Times New Roman
  - all alphabetic characters uppercase
  - following primary U.S. classification, same line
  - right-justify multiple lines

- Additional instructions for U.S. classifications:

  - **Class/subclass unit.** Show a class and subclass for each classification.

  - **Diagonal.** Show a diagonal between the class and subclass in each class/subclass unit.

  - **Space**. In a subclass, show a space between the numeric characters and any alphabetic characters.

  - **Semicolon.** Use a semicolon after each class/subclass unit except the last one.

  - **Line breaks.** Show each class/subclass unit on the same line. Do not break a class/subclass unit to overflow to another line.

  - **Digests.** Use uppercase for DIG. and show the period after the G. Show a space between DIG. and the number.

  - **Foreign collections.** Use uppercase for FOR but do not show a period after the R. Show a space between FOR and the number.

Example(s)

(52) **U.S. Cl**.…..... **84/611**; 84/619; 84/635;
84/645; 84/657; 84/445; 84/DIG. 12

Abstract – INID (57)

Data Source

The source of the INID (57) abstract will be the PACR image source or the EFS source. In the PACR image source, the abstract will be indexed under **abstract**.

NOTE: When the application being processed is the U.S. National Stage of an international (PCT) application, the abstract may be present as the image of the front page of the international application as it was previously published or the abstract may be present as the image of the PCT Gazette page that reported the publication of the international application. In the **Example(s)** section below, see under ***when PCT document is data source for abstract***.

An abstract must be present. If no abstract is indexed under abstract, the publication database contractor will look to see if an abstract has been indexed under **preliminary amendments**. See the information about abstracts under the heading **A. Data Sources** in ***Section I. OVERVIEW OF DATA CAPTURE***.

When the data source for the abstract is the PACR image file, it may happen that multiple abstracts are indexed under abstract. When this happens, the publication database contractor will compare the left- or top-margin endorsements on the image(s) of the abstract page(s) and will capture the abstract with the latest mail date.

In ***Section I. OVERVIEW OF DATA PREPARATION***, **A. Data Sources**, see under the heading **when PACR file shows multiple versions of abstract, drawing(s), specification, claim(s)**.

Pre-Capture Verification

In ***Section I. OVERVIEW OF DATA PREPARATION***, see under the heading **E. Gap or Illegibility in PACR Image of Abstract, Specification, Claim, or Drawing.**

It may happen that the abstract contains unconventional material (flow chart, graph, etc.). In ***Section V. SPECIFICATION AND CLAIMS***, see under the heading **UNCONVENTIONAL MATERIAL**.

Composition

Location

(57) **ABSTRACT** immediately follows the INID (52) U.S. Classification data.

Style

- INID code (57) is shown as follows:

  - 9-point
  - Times New Roman
  - flush left on same line as heading **ABSTRACT**

- The heading **ABSTRACT** is shown as follows:

  - 9-point
  - Times New Roman Bold
  - uppercase
  - centered in column on same line as INID code (57)
  - prelead for the first line of the abstract will be 18 points.
  - avoid widow heading wherever possible

- The text of the abstract is shown as follows:

  - 9-point
  - Times New Roman (except for Figure reference numbers, which are to be shown in Times New Roman Bold) **NOTE: This instruction to impose boldface on Figure reference numbers in the abstract is to be followed only when the data source for the abstract is a PACR image. This instruction to impose boldface on Figure reference numbers in the abstract is <u>not</u> to be followed when the data source for the abstract is EFS. The publication database contractor is <u>not</u> to make "editorial" changes to the EFS abstract, EFS specification, or EFS claims.**
  - uppercase and lowercase
  - block paragraph form (multiple paragraphs are to be printed in right-justified block paragraph form and are to be separated by a blank line)

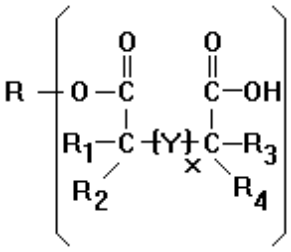
<u>Example(s)</u>

(57) **ABSTRACT**

An initial note series is collected form a real-time source of musical input material such as a keyboard or a sequencer playing back musical data, or extracted from musical data stored in memory. The initial note series may be altered to create variations of the initial note series using various mathematical operations. The resulting altered note series, or other data stored in memory, is read out according to one or more patterns. This method and the apparatus that can perform such a method have application to music and other data in general as well.

- ***when PCT document is data source for abstract.*** In the U.S. national stage of an international (Patent Cooperation Treaty) application, when no abstract is present as part of the specification and when the source for the abstract therefore becomes either the front page of the international publication or the *PCT Gazette* page. When such an abstract includes chemical formula(s), the PCT document typically shows the chemical formula(s) as being outside,that is, above or beside,the abstract's heading and text. The publication database contractor will capture the formula(s) as part of the abstract. On the compose d front page of the U.S. publication, the chemical formula(s) will follow the text of the abstract.

mockup of abstract in PCT source document :



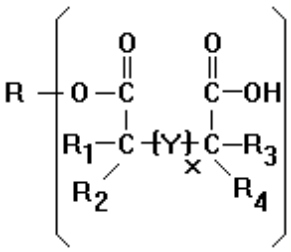
(57) **Abstract**

A compound of the formula wherein R is a hydrocarbon of from six to about 60 carbon atoms, which compound is the product of the reaction of a triol of the formula $R(OH)_3$ with an anhydride; Y is CR_5R_6, O, S, or NCH_3, wherein R_5 and R_6 are the same or different; X is 1 or 2; R_1 and R_2 are the same or different and are selected from the group consisting of hydrogen, phenyl and aliphatic of two to twenty-two carbon atoms, inclusive.

mockup of abstract on U.S. Patent Application Publication (Pre-Grant) front page :

(57) **ABSTRACT**

A compound of the formula wherein R is a hydrocarbon of from six to about 60 carbon atoms, which compound is the product of the reaction of a triol of the formula $R(OH)_3$ with an anhydride; Y is CR_5R_6, O, S, or NCH_3, wherein R_5 and R_6 are the same or different; X is 1 or 2; R_1 and R_2 are the same or different and are selected from the group consisting of hydrogen, phenyl and aliphatic of two to twenty-two carbon atoms, inclusive.



Representative Drawing – no INID Code

Data Source

When present, a representative drawing will appear on the photocomposed front page of a PAP [A1 document], the republication of a PAP [A2 document], or the corrected publication of a PAP [A9 document]. There may be up to two representative drawings.

NOTE: On the photocomposed front page of each PPAP [P1 document], republication of a PPAP [P4 document], or corrected publication of a PPAP [P9 document], the specification columns will begin immediately below the columns of bibliographic data, and no representative drawing will appear.

The data source for the representative drawing will be the PACR image source or the EFS source. In the PACR image source, the drawings will be indexed under **drawings**.

The source for identifying the representative figure will be the `<representative-figure>` field in the Supplemental BIB source. (A `<suggested-representative-figure>` field may appear on the Primary BIB source or EFS source but will be ignored.)

For example, if the Supplemental BIB source showed the following:

```
<representative-figure>Fig. 1</representative-figure>
```

then FIG. 1 would be captured from the PACR image source or EFS source.

If the Supplemental BIB source shows "None" as the representative figure, no representative figure is to be captured, even though there may be drawings in the application.

Pre-Capture Verification

The publication database contractor will capture the representative figure (up to two) in accordance with the following instructions:

(1) If the `<representative-figure>` field in the Supplemental BIB source is blank or contains a question mark, and the drawings are present in the application, the representative figure that will be captured is the lowest-numbered figure not labeled as "prior art." If no other drawings are present in the application, no representative figure should be captured.

(2) If the `<representative-figure>` field in the Supplemental BIB source identifies a drawing that's labeled as "prior art" but a valid non-prior-art drawing is also identified in the source as a representative figure, the representative figure that will be captured is the non-prior-art figure.

(3) If the <representative-figure> field in the Supplemental BIB source identifies a drawing that's labeled as "prior art" and no valid (non-prior-art) drawing is identified as a representative figure, the representative figure that will be captured is the lowest-numbered figure not labeled as "prior art."

(4) If the <representative-figure> field in the Supplemental BIB source identifies more than two drawings, the two representative figures that will be captured are the two lowest-numbered figures not labeled as "prior art."

(5) If the <representative-figure> field in the Supplemental BIB source identifies a figure that is connected (as by an arrow) to another figure and the other figure is not itself identified as a representative figure, the publication database contractor will capture the representative figure as identified by the source, except when the source is as described in **(1)**, **(2)**, **(3)**, or **(4)** above.

Composition

Location

When a representative drawing is present on an A1, A2, or A9 document, it will be centered in the bottom portion of the photocomposed front page, below the columns of bibliographic data. See under the heading **C. Order of Major Elements of Photocomposed Publications** in ***Section I. OVERVIEW OF DATA CAPTURE***.

Style

The figure reference numbers (part numbers) are shown, but the figure number is not shown.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Section IV. DRAWINGS

Drawings

Data Source

The source for the drawings will be the PACR image source or the EFS source. In the PACR image source, the drawings will be indexed under drawings.

When the data source for the drawings is the PACR image file, it may happen that multiple sets of drawings are indexed under drawings, or that there may be more than one version of an individual drawing. When this happens, the publication database contractor will compare the left- or top-margin endorsements on the image(s) of the drawing sheet(s) and will capture the drawing(s) with the latest mail date.

In ***Section I. OVERVIEW OF DATA PREPARATION***, **A. Data Sources**, see under the heading **when PACR file shows multiple versions of abstract, drawing(s), specification, claim(s)**.

Pre-Capture Verification

If a set of figures contains a figure that is numbered in a different style from the other figures in the set, or if the set of figures contains a figure that is not numbered at all, then the publication database contractor may supply the correct figure number if that correct figure number can be reasonably inferred from the indications at hand. For example:

- There are five figures numbered FIG. 1, FIG. 2, FIG. 3/5, FIG. 4, and FIG. 5. The contractor would make the correction, and FIG. 3/5 would be published as FIG. 3.

- There are five figures numbered FIG. 1, FIG. 2, FIG. 4, FIG. 5, with one figure having no number at all. The un-numbered figure appears on (the PACR image of) a drawing sheet which has the indication "3/5" in its top margin. The contractor would make the correction, and the un-numbered figure would be published as FIG. 3.

In ***Section I. OVERVIEW OF DATA PREPARATION***, see under the heading **E. Gap or Illegibility in PACR Image of Abstract, Specification, Claim, or Drawing.**

Composition

Location

See under the heading **C. Order of Major Elements of Photocomposed Publications** in ***Section I. OVERVIEW OF DATA CAPTURE***.

On the composed front page of a PAP [A1 document], republication of a PAP [A2 document], or the corrected publication of a PAP [A9 document], the drawings will appear on one or more composed drawings sheets. The utility drawing sheet(s) will follow the front page and will precede the specification pages.

On the composed front page of a PPAP [P1 document], the republication of a PPAP [P4 document], or corrected publication of a PPAP [P9 document], the drawings will appear on one or more composed drawing sheets. The plant drawing sheet(s) will follow the plant specification/claim page(s).

Style

The following heading information will appear from left to right at the top of each drawing sheet (see examples on next page), all in 12-point Times New Roman Bold:

- **Patent Application Publication** or **Plant Patent Application Pub.**
- publication date, with abbreviated month + day + comma + four-digit year
- **Sheet** x **of** y [only when there are two or more drawing sheets]
- publication number in format **US YYYY/NNNNNNN KK**

Drawing Sheet Header -- Example(s):

Patent Application Publication Feb. 20, 2003 Sheet 11 of 12 US 2003/0000001 A1

Plant Patent Application Pub. Feb. 20, 2003 Sheet 3 of 9 US 2003/0002221 P1

Patent Application Publication Feb. 20, 2003 US 2003/0000331 A1

Section V. SPECIFICATION AND CLAIMS

OVERVIEW OF SPECIFICATION AND CLAIMS

■ NUMBERING OF PARAGRAPHS IN SPECIFICATION

Any specification data tagged as a P in Red Book, regardless of the level of the P, will be shown as a numbered paragraph in the photocomposed specification.

- The publication database contractor will consecutively number the specification paragraphs and will use four-digit Arabic numerals with leading zeros. If the numbering goes beyond **[9999]**, five digits will be used beginning with **[10000]**. If the numbering goes beyond **[99999]**, six digits will be used beginning with **[100000]**. Each four-digit paragraph number will be enclosed in square brackets, and the numbers and brackets will be shown in boldface. Each paragraph number will appear flush left as the first item in the paragraph, before the first word of the paragraph, and spaced apart from the first word by a gap of approximately four spaces.

The publication database contractor's paragraph-numbering scheme will supersede any paragraph-numbering scheme that appears in the source.

■ WHEN PACR SOURCE SHOWS MULTIPLE VERSIONS OF SPECIFICATION

When the data source for the specification is the PACR image file, it may happen that multiple specifications are indexed under specification. When this happens, the publication database contractor will compare the left- or top-margin endorsements on each version of the specification and will capture the specification with the latest mail date.

In ***Section I. OVERVIEW OF DATA PREPARATION***, **A. Data Sources**, see under the heading **when PACR file shows multiple versions of abstract, drawing(s), specification, claim(s)**.

Also see under ***Claims***, **Data Source** .

■ COMPOSITION OF SPECIFICATION AND CLAIMS

Patent Application Publication Number [Specification/Claims Page]

- 12-point
- Times New Roman
- to appear on each photocomposed specification/claims sheet
- flush left on the first line at the top of the sheet, on the same line as the publication date
- shown in full, to include the "US" code and the kind code:

  US 2003/0044444 A1
  US 2003/0011111 P1
  etc.

Patent Application Publication Date [Specification/Claims Page]

- 12-point
- Times New Roman
- to appear on each photocomposed specification/claims sheet
- flush right on the first line at the top of sheet, on the same line as the publication number
- shown in the following style, with the month abbreviated [see the abbreviations under the heading **dates** in **STYLE GUIDELINES FOR SPECIFICATION AND CLAIMS**]:

  Feb. 23, 2003

Page Number [Specification/Claims Page]

- 12-point
- Times New Roman
- to appear on each photocomposed specification/claims sheet
- Arabic number (1, 2, 3, 4, etc.)
- centered on the second line from the top of the sheet
- on a utility document [A1, A2, or A9], the first specification/claims page,that is, the first page after the drawing sheets, or, when there are no drawing sheets, the next page after the front page,will be given the number 1
- on a plant document [P1, P4, or P9], if the specification/claim data (which begins on the front page) carries over to additional page(s), the next page after the front page will be given the number 2

Columns

- two 67-70-line columns on each photocomposed specification/claims sheet

Paragraph Numbers

- 9- on 10-point
- Times New Roman Bold
- enclosed in square brackets
- flush left and spaced approximately four spaces from first word of paragraph
- headings, tables, equations, listings, Sequence Listings, and claims are not to be given paragraph numbers

Running Text

- 9- on 10-point
- Times New Roman and Times New Roman Bold
- uppercase and lowercase

Complex Work Units [except sequence data]

- 7- on 8-point
- Times New Roman and Times New Roman Bold

Sequence Listing and Embedded Sequence Data

- 7- on 8-point
- Courier

NOTE: The Sequence Listing is captured from the CRF. The term embedded sequence data refers to tables and other complex work units that contain sequences and/or portions of sequences and that are captured from the EFS source, the PACR image source, or the "large table(s)" CD source.

Text Superscripts/Subscripts

- 5.5-point

Chemical Superscripts/Subscripts

- 5-point

Tabular Superscripts/Subscripts

- 4.5-point

Headings

- 9- on 10-point
- Times New Roman
- uppercase and lowercase
- avoid widow heading wherever possible

Footnotes

- 6-point
- Times New Roman
- uppercase and/or lowercase [follow source]

End-of-Text Sentinel

To indicate the end of the published application, five asterisks will be centered in the column after the last claim.

■ ATTORNEY DOCKET NUMBERS

When an attorney docket number appears in the source, the docket number will be captured and published:

application No. 08/000,000 (Docket # CVH-123)

■ OMITTED DOCUMENT NUMBERS

When the source shows a blank in place of a patent application number or other document number, the blank will be captured and published as an underscore six characters in length:

application No. _____ (our file No. AAA-333)

■ OMITTED BIOLOGICAL DEPOSIT DATA

When a blank appears in place of a biological deposit accession number or in place of other biological deposit information, the blank will be captured and published as an underscore six characters in length:

The invention also relates to a nutritional supplement having proteolytic activity and utilizing the *L. plantarum* OM ATCC _____ strain.

A microorganism grown and harvested as described herein, and exemplified by the properties as described herein, is on deposit at the American Type Culture Collection ("ATCC") as of _____, under the reference ATCC No. _____.

1. A biologically pure culture of *Lactobacillus plantarum* OM ATCC No. _____ having proteolytic activity.

■ OMITTED SEQUENCE IDENTIFICATION NUMBERS

When a blank appears in place of a Sequence ID number, the blank will be captured and published as an underscore six characters in length:

> of the following amino acid sequences (see SEQ ID Nos: _____ to _____ in Sequence Listing)
>
> in the nucleotide sequence represented by SEQ ID NO. _____

■ REFERENCES TO APPLICANT'S PAGINATION SCHEME OR APPLICANT'S PARAGRAPH NUMBERING SCHEME

When the source refers to the applicant's pagination scheme or when the source refers to the applicant's scheme of paragraph numbering (as opposed to the paragraph numbering scheme imposed by the publication database contractor), the page reference or paragraph reference will be captured and published (that is, the publication database contractor will follow copy):

> As was stated on Page 14, the by-product was ascorbic acid.
>
> The calculations are detailed on the following page.
>
> The results are shown above in paragraph **[0022]**.

■ COMPUTER PROGRAM LANGUAGE EMBEDDED IN THE SPECIFICATION

It is possible for sections of computer program language to appear within the body of the specification. When such a section of computer program language appears within the body of the specification, the publication database contractor will capture it as an embedded image (i.e., as "camera-ready copy").

■ GAP OR ILLEGIBILITY IN PACR IMAGE

In ***Section I. OVERVIEW OF DATA PREPARATION***, see under the heading **E. Gap or Illegibility in PACR Image of Abstract, Specification, Claim, or Drawing.**

■ UNCONVENTIONAL MATERIAL

definition. In this manual the term "unconventional material" means either of the following:

(i) material that departs from standard patent text formats,for example, a magazine article, an academic paper, a textbook chapter, a promotional brochure, a set of laboratory notes, etc.;

(ii) a drawing, flow chart, or graph that the applicant, in violation of the rules (e.g., 37 CFR 1.58), has included within the body of the specification, claims, or abstract.

guidelines for publication database contractor. With respect to unconventional material (as defined above) in PACR images indexed as **specification** (or **claims** or **abstract**), the publication database contractor should follow these guidelines.

■ Guideline No. 1

As stated on Page I-4 of this manual, PACR images indexed as **miscellaneous papers** are "Not to be used as a data source by the publication database contractor." The publication database contractor will not capture any images indexed as **miscellaneous papers** (that is, any images in the **miscellaneous papers** "folder"). The publication database contractor will disregard the images indexed as **miscellaneous papers**.

■ Guideline No. 2

If unconventional material (as defined above) is present in the PACR image source indexed as **specification** and if the pages containing the unconventional material are included within the consecutive page numbering of the specification, then the publication database contractor will capture the unconventional material as an image ("camera-ready copy") and will publish it within the body of the specification in the same location at which the source shows it. If unconventional material is included within PACR images indexed as **claims** or **abstract**, the publication database contractor will seek guidance from the Pre-Grant Publication Division.

Example A: The PACR image source indexed as **specification** shows Pages 1 through 56. Page 38 shows FIG. 1 and Page 52 shows FIG. 2. The two drawings would be captured as images and published within the body of the specification in the locations at which they appear in the source.

Example B: In the PACR image source indexed as **claims**, Claim 4 contains a bar graph. The publication database contractor would seek guidance from the Pre-Grant Publication Division.

Example C: The PACR image source indexed as **specification** shows Pages 1 through 84. Pages 62 through 84 show a chapter from a book. The book chapter would be captured as an image and published at the end of the specification, as shown in the source.

■ Guideline No. 3

If unconventional material (as defined above) is present in the PACR image source indexed as **specification** (or **claims** or **abstract**) and if the unconventional material is a section with its own separate pagination or with no pagination at all, then the publication database contractor will not capture the unconventional material. EXCEPTION: If the separately paginated or unpaginated section shows table(s) only, the publication database contractor will capture those table(s) in the conventional manner, and they will be published at the end of the specification. Otherwise,for example, when the separately paginated or unpaginated section shows a mixture of table(s) and text,the separately paginated or unpaginated section will be treated as unconventional material and will not be captured.

Example D: The PACR image source indexed as **specification** shows Pages 1 through 37 plus Pages A1 through A22. The A1-through-A22 section shows an article from a scientific journal. Pages A1 through A22 would not be captured.

Example E: The PACR image source indexed as **specification** shows Pages 1 through 98 plus Pages A through J. The A-through-J section shows conventional Tables 1, 2, 3, and 4 (that is, the section shows tables only, with no surrounding text). The conventional tables on Pages A through J would be captured in the conventional manner and published at the end of the specification.

■ STYLE GUIDELINES FOR SPECIFICATION AND CLAIMS

NOTE: These style guidelines are to be used only when the data source is a PACR image. These guidelines are <u>not</u> to be used when the data source is EFS. The publication database contractor is <u>not</u> to make "editorial" changes to the EFS abstract, EFS specification, or EFS claims.

abbreviations [when source is PACR]

- If the source shows an abbreviation, particularly an abbreviation in chemical and mathematical subject matter, the publication database contractor will retain the abbreviation.

- The contractor must not substitute an abbreviation for a spelled-out term.

- Abbreviations for Centigrade/Celsius and Fahrenheit must never be deleted. If the source does not show a period after C or F, the contractor will add the period. If the C or F is repeated in the source, the publication database contractor will follow the source. For example:

  50° C. to 200° C.

  100° to 150° C.

  98.6° F.–100.2° F.

  200°–250° C.

  13° C., 33° C., and 43° C.

  −15°, −3°, and +5° C.

binary numbers [when source is PACR]

- Show each binary number in lightface:

  logic 0

  1001 0010

- Show a binary number in word form when it appears in word form in the PACR source:

  logic one

- If the PACR source shows a binary number within quotation marks, show the quotation marks:

  logic "1"

  "1101"

boldface [when source is PACR]

- The application's claim numbers, figure numbers, and figure reference numbers (part numbers) will be shown in boldface.

- When a figure number appears in boldface, the word or abbreviation (**FIG.**, **FIGS.**, etc.) immediately preceding the number will also be shown in boldface.

- Sometimes a specification refers to the figure numbers and part numbers of drawings from other applications. Since they do not belong to the application currently being processed and do not appear in the drawings of the application currently being processed, such figure numbers and part numbers will shown in lightface. The only figure number and part numbers that are to be shown in boldface are those belonging to the application currently being processed.

- Claim numbers will be shown as follows:

  19. A method of claim **17** wherein R_1 is …

  1. A prefabricated cap frame for a uniform cap of the …

- Figure numbers will be shown as follows:

  FIG. 4 is

  as shown in **FIG. 8**

- Figure reference numbers (part numbers) will be shown as follows:

  dowel **6**

  shoulder support **87**

braces, brackets, parentheses [when source is PACR]

- The publication database contractor will show braces, brackets, and parentheses as they appear in the source. The contractor will not substitute one of these types of punctuation for another.

claims [when source is PACR]

- When the source refers to a numbered claim and the word Claim is capitalized, the publication database contractor will change Claim to claim, except when Claim occurs at the beginning of a sentence:

  image source version ➔ `the method of Claim 10 wherein`

  publication version ➔ the method of claim **10** wherein

- Claim numbers are shown in boldface.

- Each claim is shown as a single-sentence paragraph. There may be subparagraphs in a "hanging paragraph" format (with second and succeeding lines indented).

- When it appears in a reference to another claim, the word claim will not be capitalized.

  For example:

5. A prefabricated cap frame as claimed in claim **1** in which the uniform cap is of the type having a visor and a grommet for supporting and stretching the top of the cap comprising a one-piece structure molded from a flexible synthetic resin and including a perforated band portion in the form of a substantially flat open strip adapted to be curved and joined at the ends to form the hat band,

said band portion including a thickened portion at the upper edge thereof for reinforcement,

and an integral vertical stay portion extending from the upper edge of said band portion.

6. A prefabricated cap frame as claimed in claim **1** in which the uniform cap is of the type lacking a visor but having a grommet for supporting and stretching the top of the cap comprising a one-piece structure molded from inflexible natural resin and including an interlinear band portion in the form of a substantially arched closed strip adapted to be joined at the ends to form the hat band,

said band portion including a thickened portion at the lower edge thereof for reinforcement,

and an integral oblique stay portion extending from the lower edge of said band portion.

7. A prefabricated cap frame in which the uniform cap is of the type having a visor and a grommet for supporting and stretching the top of the cap comprising a two-piece structure molded from a woven synthetic fabric and including an irregular band portion in the form of a substantially flat open strip adapted to be curved and joined at the ends to form the hat band,

(i) said band portion including a thickened portion at the upper edge thereof for reinforcement,

(ii) said two-piece structure including an irregular dual strand for oblique support.

dashes (em dashes and hyphens) [when source is PACR]

- When the source sets off a phrase or clause with a dash or double dash, the publication database contractor will show an em dash. For example, if the source contains the following:

```
The dowel--slightly shorter that the track--
can now be removed.
```

  the publication database contractor will show the following:

The dowel—slightly shorter than the track—can now be removed.

- In a chemical formula, the publication database contractor will show an em dash to represent a single bond:

  —O—$(CH_2)_4$—O—

- The publication database contractor will show a hyphen as the connective punctuation when the source refers to figure parts using paired letters or numerals:

  axis A-A

  line **12-12**
  axis A-B

  line **p-q**

- When the source presents a range, the publication database contractor will show a hyphen as the connective punctuation:

  FIGS. 3-6

  10-15%

  C_1-C_3

- When the correct spelling of a compound word contains a dash, a hyphen should be shown:

  24-inch channel

  Winston-Salem

- When a word is divided at the end of a line, a hyphen will be used. Words in titles or headings are not to be divided:

  .. the result is a dis-
  continuity in the ...

dates [when source is PACR]

- When the source shows the month and the year without the day, or shows the month alone, the publication database contractor will spell out the month.

- When the source shows month, day, and year, the publication database contractor will abbreviate the month:

Jan.	Feb.	Mar.	Apr.	May	Jun.
Jul.	Aug.	Sep.	Oct.	Nov.	Dec.

- The publication database contractor will show the year as four digits.

  Examples:

image source version	published version
December 1984	December 1984
Dec. 1984	December 1984
12-84	December 1984
December 14, 1984	Dec. 14, 1984
14 December 1984	14 Dec. 1984
12-14-84	Dec. 14, 1984

decimals [when source is PACR]

- A firearm caliber will be shown without a leading zero:

  .22

  .38

  .45

- Any other term beginning with a decimal will be shown with a leading zero:

  0.324

  0.15

- Comma-style decimals are shown as decimal points:

source version	publication's version
99,9%	99.9%
3,27	3.27

diacritical marks [when source is PACR]

- If a diacritical mark appears in the source, the publication database contractor will capture that diacritical mark:

  as measured in Ångström units

figure numbers [when source is PACR]

- When the source refers to a numbered figure, the publication database contractor will show the appropriate term **FIG.** or **FIGS.** in all-uppercase boldface Roman, and will show the Arabic numeral in boldface Roman.

source version	published version
`Figure 3`	**FIG. 3**
`Fig. 3`	**FIG. 3**
`Figures 1-5`	**FIGS. 1-5**
`FIG. 19`	**FIG. 19**

- When the source refers to a sole unnumbered figure, the publication database contractor will capture the all-uppercase term **FIGURE** in boldface Roman:

  belt anchor C in the **FIGURE** is removed

- When the source makes general references to figures, the publication database contractor will not alter what the source shows:

  as shown in the Figures

  the following figure will show

- When the source shows figure numbers that include alphabetic characters, the following guidelines will be observed by the publication database contractor: (1) uppercase letters in figure numbers will be shown in boldface Roman; (2) lowercase letters in figure numbers will be shown in boldface italics.

  FIG. 3A

  FIG. 3*a*

  FIGS. 9A–9D

  FIGS. 12*a*–12*f*

  FIGS. 9*a*–*d*

  FIG. 4-*b*

  FIG. 5(*c*)

footnotes [when source is PACR]

- A footnote is shown immediately after the paragraph that contains the first or only reference (marked by an asterisk, a number, etc.) to that footnote.

- If the source shows the footnote at the bottom of a page and the footnote does not immediately follow the relevant paragraph, the publication database contractor will move the footnote to the correct location.

- If a later paragraph refers to the footnote, the footnote is not repeated, unless the source itself repeats the footnote.

  For example:

[0011] The literature in the field depicts several largely successful defenestration techniques. In 5th century B.C.E. Greece, the so-called "push" technique was already widely known. Traditionally, the first attempt at mechanical defenestration was made by Glazus Fractus in Rome circa 150 B.C.E., but more recent scholarship has discounted that tradition by pointing to its essential anachronism. There has been general agreement* that the greatest advances in defenestration were made during the 18th Century in France and Prussia, and that no significant advances have been made since that time.

* O. Penn Wenders, *Defenestration in History*, Hysterion Press, 1975

[0012] Admittedly, no defenestration technology can be successful without utilizing in some manner the principle of the classic "push" technique. It has been said* that the "push" technique is "absolutely essential" to any successful defenestration technology. Beyond that, however, this invention departs from all prior defenestration devices and techniques.

headings [when source is PACR]

- When headings are present in the source, the publication database contractor will capture them in lightface Roman.

- Words in headings will not be divided.

- Especially when the standard primary headings (BACKGROUND OF THE INVENTION, SUMMARY OF THE INVENTION, etc.) are being used, the publication database contractor will impose the following formats in order to indicate the hierarchy of the headings.

  Primary headings such as BACKGROUND OF THE INVENTION, BRIEF DESCRIPTION OF THE DRAWINGS, etc. are usually shown in uppercase and centered in the column.

  Secondary headings are usually shown uppercase/lowercase and centered in the column.

- If the specification does not use the standard primary headings described above or if the hierarchy of headings is unclear or problematic, the headings must be shown as they appear in the source.

italics [when source is PACR]

- In the scientific names of plants and animals, italicize genus plus species:

  Musca domestica

  E. coli

- Italicize species standing alone:

  tuberosa

  cardinalis

- Do not italicize genus standing alone or family standing alone:

  birds of the genus Ara are

  various Salmonella sp. can

  turtles of the family Trionychidae

- Italicize any classification beyond species, such as subspecies or variety:

  Cyanoderma erythroptera neocara

  Cypripedium parviflorum var. *pubescens*

  In the second example above, note that var. is Roman.

- In chemical formulas, italicize any on-line lowercase letter that represents an unknown or variable number:

  xH_2SO_4

  —C*y*H*y*

- Italicize the names and titles of court cases:

  the *Brown* case

  Ex parte 74

  John Doe v. *Mary Doe*

  NOTE: Note in third example above that v. is Roman.

- Italicize any lowercase letter in a figure designation or a figure reference designation (part number):

  FIG. 2*b*

  dowel **12*c*** in **FIG. 9*c***

  panels **5(*a*)** and **5(*b*)**

  widget control elements **20*a*–20*e***

- The following guidelines apply to mathematical equations and other mathematical expressions that are spaced apart from the running text and given their own line or lines. These rules do not apply to mathematical equations and other mathematical expressions that are incorporated into the running text.

  Italicize any on-line letter, whether uppercase or lowercase, that represents an unknown or variable.

  Do not italicize such terms or abbreviations as cos (cosine), tan (tangent), sec (secant), fps (feet per second), etc.

  Do not italicize off-line characters (superscripts and subscripts).

  $A_1 = k_{11}c_1+k_{13}c_3 \ldots k_{2n}c_n$ Eq. 1

  $e_o = \tan(2_{R2!R1}) + 6c$ [Equation 22]

- Italicize the title of a book, magazine, etc. only when that title is underscored in the source or italicized in the source.

source version	publication version
New England Journal of Medicine	*New England Journal of Medicine*
New England Journal of Medicine	*New England Journal of Medicine*
New England Journal of Medicine	New England Journal of Medicine

lightface numbers [when source is PACR]

- Except for the application's figure numbers, part numbers, and claim numbers, the Arabic numerals in the specification are shown in lightface:

3 to 8 carbon atoms

Example 3

11011101

logic 1

Table 7

1. Field of the Invention

82nd Airborne

Ser. No. 08/000,000

U.S. Pat. No. 7,654,321

value of 5

2 bits

Dec. 14, 1984

1-2 shift

Octal 40

hexadecimal 13E

0.03 to 0.12%

n is 1, 3, or 5

25° C.

octene-1

pH of 1

2-chloro-1, 1, 1, 2-tetrafluorothane

(L+1) number of levels

B4 constellation set

a <100> crystal orientation

1 + 1 = 2

- Sometimes a specification contains references to figures in other applications or patent grants. Since such figures are not the formal drawings of the application that is being processed, these figure numbers and part numbers are not to be shown in

boldface. Rather, such figure and part numbers are to be shown in lightface. For example:

> In FIG. 2 of our U.S. Pat. No. 0,000,000 a ring belt 18 extends downwardly from the top of piston head 12.

However, when the drawing sheets of the application at hand contain drawings labeled as PRIOR ART, the figure numbers and part numbers of the "prior art" drawings will be shown in boldface in the specification.

punctuation [when source is PACR]

- See **abbreviations**.

- See **dashes [em dashes and hyphens]**.

- When the source shows punctuation in a centered heading, do not retain the punctuation. For example:

```
BACKGROUND OF THE INVENTION:

 (SUMMARY OF THE INVENTION)

DESCRIPTION OF THE DRAWINGS.
```

will be shown as:

BACKGROUND OF THE INVENTION

SUMMARY OF THE INVENTION

DESCRIPTION OF THE DRAWINGS

- When the source shows extraneous punctuation in the following side-headings, do not retain the extraneous punctuation:

1. Field of the Invention: ← do not show the colon
2. Prior Art. ← do not show the second period

- The source shown many punctuation styles for the numbers and letters that mark items in a listing. For example:

(a) one thing
(b) another thing
(c) still another thing

1) one thing
2) another thing

3) still another thing

1. one thing
2. another thing
3. still another thing

The punctuation style shown in the source version of the listing will be shown in the publication. However, the publication database contractor must impose a consistent style whenever the source shows a mixed style. For example:

```
(1) one thing
(2) another thing
3)  still another thing
```

will be shown in a consistent style:

(1) one thing
(2) another thing
(3) still another thing

quotation marks [when source is PACR]

- When quotation marks appear in the source, the publication database contractor will retain them.

- Single quotation marks are not converted to double quotation marks, and double quotation marks are not converted to single quotation marks.

  For example:

  O. Penn Wenders, "Defenestration Techniques in the Nineties"

  logic '1' and logic '0'

  consistent with the "big bang" theory

Roman [when source is PACR]

- Use Roman for genus when it appears without species, and use Roman for any classification (order, family) above genus:

  Salmonella

  Salmonella sp.

  species of Salmonella

- Use Roman for the names of diseases, anatomical terms, geological terms, chemicals, etc.:

  diabetes mellitus

  medulla oblongata

  terra alba

- Use Roman for foreign words and phrases:

  pro se

  infra

  sans

- The following guidelines pertain to mathematical and chemical data when they appear in the running text of the specification and when they are spaced apart on their own lines.

  Use Roman in equations and formulas for all on-line numerals:

  $x + 1 = y - 2$ Eq. 5

  but 2, 3—C_2H_3—O— is the product when

  Use Roman for all off-line (inferior and superior) characters:

  $A_1 = k_{11}c_1+k_{13}c_3 \ldots k_{2n}c_n$ Eq. 1

  $[(Fe_{1!y}Ni_y)_{1!x}M_x]_{1!z}N_z$ is represented by

  Use Roman for mathematical and chemical symbols:

  F

  ‰

  ÷

  Use Roman for abbreviations of processes, elements, and names of functions:

  cosR+1

  NaCl

  Use Roman for alphabetic variables when the text is discussing equations and formulas:

  in which n = 1

  wherein R^6 is —O—

  m, n, o, and p are the monomer contents

- Use Roman for the printing of citations from the *Official Gazette*:

  1148 O.G. 20

- Use Roman for stand-alone letters in the text, both lowercase and uppercase:

  angle b of FIG. **6***a* indicates the maximum swivel range of

  not true when X = 15

- Use Roman for publication titles that are not underscored or italicized in the image source:

source version	publication version
New England Journal of Medicine	*New England Journal of Medicine*
New England Journal of Medicine	*New England Journal of Medicine*
New England Journal of Medicine	New England Journal of Medicine

spacing [when source is PACR]

- The publication database contractor will show a space between the comma and the following word and in a series of three or more items:

  x-, y-, and z-compounds

  one, two, and three

- The publication database contractor will show a space between a symbol (such as a degree symbol) and a measurement unit abbreviation (such as C. or F.):

  10° C.

  from 98.3° to 101.4° F.

- Tables, formulas, and equations set apart from the running text must be preceded and followed by equal "white space":

first causing an alkali metal sulfide to act on a poly-(arylene thioether) having recurring units represented by the general formula (3):

—(Ar—S)— (3)

[0087] wherein Ar is an arylene group, in a water-containing polar organic solvent to depolymerize poly(arylene thioether), **and** thereby preparing an oligomer having at least one alkali thiolate group.

spelling [when source is PACR]

- The publication database contractor will capture the spelling that appears in the source. When the spelling of a word in the source is correct but is not the preferred spelling, retain the spelling that appears in the source.

- If the publication database contractor encounters an obvious spelling error, the error must be corrected. For example, if the phrase `depress the clutch pdal` appears in the image source, the phrase must be corrected to read depress the clutch pedal.

trademarks, copyrights, service marks [when source is PACR]

- Names of trademarked products are capitalized:

  surface **30** composed of Plexiglas®

- When the symbols for trademark, registered trademark, copyright, and service mark appear in the source, the symbols must be shown:

  ™ ® © 4

- When, instead of using a symbol, the source spells out a word such as Trademark, Copyright, etc., the publication database contractor will capture the spelled-out word.

- In biotechnology applications and elsewhere, certain uncircled R designations may resemble registered trademark symbols but in fact are not registered trademark symbols. For example, an R superscript attached to the abbreviated or full name of an antibiotic denotes resistance to that antibiotic. All of the following terms mean "ampicillin-resistant":

  amp^{R}

  Amp^{R}

  ampicillin^{R}

  Ampicillin^{R}

  Similarly, resistance to tetracycline would be indicated by tc^{R} and its variants. Such R superscripts are to be captured as they appear in the source, and the registered trademark symbol will not be captured. Nevertheless, the registered trademark symbol does sometimes appear in biotechnology specifications—for example:

  Amberlite® IRC resin column

  a column of Sephadex® G50

Therefore, when the source shows an R designation with no circle around it, the publication database contractor will adhere to the following guidelines:

If the uncircled R clearly represents something other than a registered trademark symbol, do not show ® in place of the uncircled R. Show the uncircled R.

If there is any doubt about the meaning of the uncircled R, do not show ® in place of the uncircled R. Show the uncircled R.

If the uncircled R is clearly intended to be a registered trademark symbol (that is, it appears with such terms as Plexiglas, Microsoft, etc.), show ® in place of the uncircled R.

Title of the Invention

Data Source

- **PAP [A1 document], republication of PAP [A2 document] and corrected publication of PAP [A9 document]**

In a Pre-Grant utility [A1, A2, or A9] document, the title of the utility invention will be captured from the Primary BIB source as discussed in this manual under the heading ***Title of Invention + INID (54)***. The title will be presented as a centered heading at the beginning of the utility specification.

Under PTO rules the applicant may elect to show the title of the invention at the beginning of his/her specification or may elect to show the title on an Application Data Sheet. However, the title of the invention as it may appear on the PACR image of the beginning of the specification or on the EFS source will be ignored and will not be captured. Similarly, the title of the invention as it may appear on the PACR image of the Application Data Sheet will be ignored and will not be captured**.**

- **PPAP [P1 document], republication of PPAP [P4 document], and corrected publication of PPAP [P9 document]**

In a Pre-Grant plant [P1, P4, or P9] document, the title of the invention is not presented at the beginning of the plant specification. On a photocomposed P1, P4, or P9 document, the plant specification begins beneath the bibliographic columns of the plant publication's front page. On a photocomposed P1, P4, or P9 document, the title of the invention will appear only at INID (54).

Pre-Capture Verification

None. That is, the publication database contractor will not compare the title of the invention as it appears in the Primary BIB source with the title of the invention as it may appear anywhere in the PACR image source or in the EFS source.

Composition

- **PAP [A1 document], republication of PAP [A2 document], or corrected publication of PAP [A9 document]**

Location

The title of the invention will be shown as a heading at the very beginning of the utility [A1, A2, or A9] specification.

Style

- 9-point
- Times New Roman Bold
- uppercase
- centered as the first heading, before any other heading and before Paragraph **[0001]**

■ **PPAP[P1 document], republication of PPAP [P4 document], or corrected publication of PPAP [P9 document]**

The title of the invention is **not** shown at the beginning of the photocomposed version of the specification of a re-grant plant [P1, P4, or P9] document.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

"First Sentence" Reference to Prior Related Application(s) and "First Sentence" Reference to Publication/Non-Publication in English

Data Source

■ **"First Sentence" Specific Reference to Prior Related Application(s)**

If a "'first sentence' reference to prior related application(s)" is present in the PACR image source or in the EFS source, it will be captured as part of the specification.

When the applicant wants the benefit of the filing date(s) of earlier application(s), he or she is required by statute to provide a "specific reference" to any such earlier filed application(s). Under PTO rules this "specific reference" either may appear as the "first sentence of the specification" or may appear on an Application Data Sheet.

If the applicant has included such a "first sentence" reference at the beginning of the specification, the reference will be captured.

In accordance with instructions for identifying and tagging the "cross-reference-to-related-applications" element, the publication database contractor will make sure that the element is presented in the proper order in conformance with the DTD, and the photocomposed specification will follow this order as well.

It is acceptable for a "first sentence" reference to be absent from the specification; even though bibliographic **Related U.S. Application Data** is present on the photocomposed front page.

When the "first sentence" contains continuity data and/or data about prior provisional applications, the "first sentence" will not be used as a data source for the continuity data that will appear bibliographically as **Related U.S. Application Data** on the photocomposed front page. The sole source for the front page's **Related U.S. Application Data** will be the Primary BIB source, as described in this manual under the heading ***Related U.S. Application + INID (60, 62, 63, 66)***.

NOTE: However, in ***Section III. BIBLIOGRAPHIC COLUMNS*** under **Related U.S. Applications – INID (60, 62, 63, 66)**, see the information under the heading **EXCEPTION TO "Primary BIB" AS SOURCE FOR RELATED U.S. APPLICATION DATA EXCEEDING "Primary BIB" STORAGE LIMIT**.

■ **"First Sentence" Reference to Publication/Non-Publication in English**

The PACR image or EFS source may contain a statement as to whether or not the application was previously published in English under PCT Article 21(2). Such a sentence is required as the "first sentence of the specification" when the applicant "claims the benefit of an international application." Even when the Application Data Sheet is the location of the applicant's "specific reference" to the prior related international (PCT) application, the reference to publication/non-publication in English must appear as the "first sentence" of the specification.

If the applicant has included a "first sentence" reference to publication/non-publication in English, the reference will be captured as is.

The publication database contractor is not responsible for determining the accuracy or completeness of the reference to publication/non-publication in English.

Pre-Capture Verification

None. That is, the publication database contractor is not to compare the "first sentence" reference to prior related application(s)" with the **Related U.S. Application Data** that is captured from the Primary BIB source. The contractor is not responsible for the accuracy or completeness of the "first sentence" reference to prior related application(s).

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Statement of Government Interest

Data Source

If a statement of government interest is present in the PACR image source or in the EFS source, it will be captured as part of the specification.

In accordance with instructions for identifying and tagging the statement of government interest ("federal-research-statement") element, the publication database contractor will make sure that the element is presented in the proper order in conformance with the DTD, and the photocomposed specification will follow this order as well.

Pre-Capture Verification

None. See above.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Incorporation by Reference of Material Submitted on Compact Disc

Data Source

If an incorporation-by-reference statement is present in the PACR image source or in the EFS source, it will be captured as part of the specification.

The material being incorporated by reference is material that the applicant submitted in compact disc (CD) form. In this manual, see the information in ***Section I*** under the heading **B. Compact Disc Submission by Applicant**. The incorporation-by-reference must be in the form of "a separate paragraph … identifying each compact disc by the names of the files contained on each of the compact discs, their date of creation and their sizes in bytes."

The incorporation-by-reference statement may refer to three kinds of data that were submitted in CD form,specifically, a computer program listing and/or large table(s) and/or a Sequence Listing.

Although the computer program listing will not be captured and although the large table(s) and/or the Sequence Listing will be captured, the publication database contractor will capture the incorporation-by-reference statement as it appears in the source and will not revise, amend, or delete it.

If the applicant did make a CD submission but the incorporation-by-reference statement is missing from the specification source, the publication database contractor will not take any action to obtain such an incorporation-by-reference and will capture the specification as it appears in the source.

NOTE: The CD rule with respect to computer program listings replaces the previous "microfiche appendix" rule. If the publication database contractor encounters an application filed in accordance with the "microfiche appendix" rule, the contractor will capture the specification's reference of the microfiche appendix. The contents of the microfiche appendix will not be captured. The PTO's rules permit applicants to use the "microfiche appendix" procedure until March 1, 2001.

Pre-Capture Verification

None. See above.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Copyright Authorization

Data Source

When it is present, the copyright "authorization language" will appear in the PACR image source or in the EFS source.

When copyrighted material appears within a patent application, the so-called "authorization language" will "be included at the beginning of (preferably as the first paragraph) of the specification."

In accordance with instructions for identifying and tagging the copyright authorization ("copyright-statement") element, the publication database contractor will make sure that the element is presented in the proper order in conformance with the DTD, and the photocomposed specification will follow this order as well.

The "authorization language" will contain the following wording:

```
   A portion of the disclosure of this patent document
contains material which is subject to (copyright or mask
work) protection.  The (copyright or mask work) owner
has no objection to the facsimile reproduction by any one
of the patent document or the patent disclosure, as it
appears in the Patent and Trademark Office patent file or
records, but otherwise reserves all (copyright or mask
work) rights whatsoever.
```

Pre-Capture Verification

None.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

None.

Latin Name and Varietal Denomination

Data Source

In this manual see the information under the heading *Latin Name & Varietal Denomination (Plants Only) + INID (50)***.**

The Latin name and varietal denomination may appear in the plant specification. If the PACR image source or EFS source shows these items as part of the plant specification, the items will be captured and shown there.

The PACR image of, or EFS version of, the plant specification will not serve as the source for the capture of the bibliographic versions of the Latin name and varietal denomination that are to be shown at INID (50) on the PPAP front page. If the Latin name and varietal denomination appear in the PACR image source or EFS source but do not appear in the Primary BIB source, then no Latin name and varietal denomination will be captured for INID code (50).

Pre-Capture Verification

None. That is, if the Latin name and varietal denomination are captured from the Primary BIB source and are shown bibliographically on a PPAP [P1 document], republication of a PPAP [P4 document], or corrected publication of a PPAP [P9 document], and if the Latin name and varietal denomination also appear as part of the specification, then the publication database contractor will not compare, correct, or harmonize the two versions of the data.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Background and/or Summary of the Invention

Data Source

The "background and/or summary of the invention" portion of the specification will be captured from the PACR image source or from the EFS source.

Pre-Capture Verification

None.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Brief Description of the Drawings

Data Source

If present, the "brief description of the drawings" portion of the specification will be captured from the PACR image source or from the EFS source.

If the application does not contain any drawings, there will be no "brief description of the drawings" in the specification.

If there is but one drawing in the application, the applicant may elect not to provide a self-contained "brief description of the drawings" section.

Even when an application does in fact contain drawings, it may happen that the applicant omits the "brief description of the drawings" from the specification. Such a specification will be published without a "brief description of the drawings."

In a plant application, the drawings need not be identified by figure numbers or contain part numbers.

Pre-Capture Verification

None. That is, the publication database contractor will not compare the image of the specification's "brief description of the drawings" with the images of the drawings, and will not take steps to compare, correct, or harmonize the figure numbering in the specification's "brief description of the drawings" and the figure numbering on the drawings.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

In the specification's "brief description of the drawings" section, if there is a series of figure descriptions and each description starts on a new line, each such figure description will be numbered as a paragraph, whether the each figure description ends with a period or whether each figure description ends with a semicolon or other non-final punctuation. If there is an introductory paragraph in the "brief description of the drawings," the introductory paragraph will be given a paragraph number, even if the source shows it as ending with a colon or some other non-final punctuation. If the "brief description of the drawings" is shown in the source as a single paragraph (that is, as a single block of text with no subdivisions), then the paragraph will be numbered as a single paragraph.

If a heading is present (for example, BRIEF DESCRIPTION OF THE DRAWINGS), it is not given a paragraph number.

Example(s)

In ***Section V. SPECIFICATION AND CLAIMS + OVERVIEW OF SPECIFICATION AND CLAIMS***, see EXAMPLES 1 through 5 under NUMBERING OF PARAGRAPHS IN SPECIFICATION. Also, see ***Section VI. SAMPLE DOCUMENTS***.

Detailed Description of the Invention (Utilities) or Detailed Botanical Description (Plants)

Data Source

The "detailed description of the invention" or "detailed botanical description" portion of the specification will be captured from the PACR image source or from the EFS source.

Pre-Capture Verification

None.

Composition

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Appendix [Large Table(s) Filed on Compact Disc or via EFS]

Data Source

The sole source for the capture of the "large table(s)" appendix will either be the copy of the CD that the PTO will send or the large table(s) supplied via EFS in either ASCII (text) format or USPTO-acceptable standard table mark-up language as defined in the USPTO Patent Application Publication (PAP) document type definition (DTD).

Pre-Capture Verification

None.

Composition

Location

If a "large table(s)" appendix is present, it will precede the Sequence Listing (if one is present) and the claims. That is, the following order will be observed:

- specification text [*required*]
- "large table(s)" appendix from CD or EFS source [*if present*]
- Sequence Listing from CRF [*if present*]
- claim(s) text [*required*]

Style

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***.

Example(s)

None.

Sequence Listing - When Sequence Listing is to be Published As Part Of The Patent Application Publication

Data Source

The sole source for the capture of the Sequence Listing is the copy of the CRF that will be supplied by STIC.

NOTE: The Sequence Listing is captured from the CRF. The term embedded sequence data refers to tables and other complex work units that contain sequences and/or portions of sequences and that are captured from the EFS source, the PACR image source, or the "large table(s)" CD source.

Pre-Capture Verification

None.

Composition

Location

If a Sequence Listing is present, it will immediately precede the claim(s). That is, the following order will be observed:

- specification text [*required*]
- "large table(s)" appendix from CD or EFS source [*if present*]
- Sequence Listing from CRF [*if present*]
- claim(s) text [*required*]

Style

See **PHOTOCOMPOSITION INSTRUCTIONS** in ***Section V. SPECIFICATION AND CLAIMS***, under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***. In the photocomposed patent application publication, both the Sequence Listing and the embedded sequences are to be shown in 7-point Courier.

Rules for the publication of Sequence Listings:

1. The Sequence Listing must appear immediately before the claims.

2. The Sequence Listing must be shown in a single-column format—that is, across the entire photocomposed page.

3. A horizontal line must separate the Sequence Listing from what precedes it.

4. The following fields in the CRF will not be captured:

```
(i)    APPLICANT
(ii)   TITLE OF INVENTION
(iv)   CORRESPONDENCE ADDRESS
(v)    COMPUTER READABLE FORM
(vi)   CURRENT APPLICATION DATA
(vii)  PRIOR APPLICATION DATA [if present]
(viii) ATTORNEY/AGENT INFORMATION
(ix)   TELECOMMUNICATION INFORMATION
```

OR

```
<110>  Applicant
<120>  Title of Invention
<130>  File Reference [docket number]
<140>  Current Application Number
<141>  Current Filing Date
<150>  Prior Application Number
<151>  Prior Application Filing Date
<170>  Software
```

NOTE: Under the revised rules, there are no numeric equivalents for the following English-language side-headings: CORRESPONDENCE ADDRESS; ATTORNEY/AGENT INFORMATION; and TELECOMMUNICATION INFORMATION.

5. The Sequence Listing must appear in the standardized "PatentIn" format.

NOTE: Most Sequence Listings are generated from the "PatentIn" software. Sometimes, an applicant submits a Sequence Listing that does not contain indentations. The publication database contractor will reformat such a Sequence Listing.

6. The Sequence Listing must contain no large blank spaces.

NOTE: The Sequence Listing must be continuous, without large blank spaces between or within its sequences. These large spaces are caused by "hard page break" codes in the applicant's CRF. The publication database contractor must close up these spaces.

7. Nucleotide base codes must be vertically aligned in the right margin.

8. The enumeration of amino acids must show a number beneath every fifth amino acid.

NOTE: Amino acid enumerators become misaligned when the applicant separates the amino acid numbers with TAB codes. These codes do not properly convert to ASCII text, which is the required format for a Sequence

Listing submitted to the PTO. The publication database contractor must correct any such misalignment that appears in the CRF source.

9. Nucleotide bases in "non-coding" parts of a sequence must be spaced apart in groups of ten, with leftover bases (that is, a group of fewer than ten) separated from the adjacent group by a space. Nucleotide bases in "coding" parts of a sequence must be shown in groups of three.

10. No page numbers or other "footers" are to appear in the printed Sequence Listing.

    NOTE: Some applicants include page numbers in the CRF. Depending on where they are inserted, these page numbers may not be detected by STIC's verification software. The publication database contractor must make sure that such Sequence Listing page numbers are not captured.

11. Each amino acid must be shown in full. A line's last amino acid designator must not drop to the next line.

    NOTE: After an applicant has created the Sequence Listing file in "PatentIn" software, the applicant may retrieve this ASCII file into his or her word processing software for further editing or printing. However, word-processing software packages have their own unique settings. This may lead to a "wrapping" problem, where the last amino acid designator in a line drops to the next line. The publication database contractor must recognize this "wrapped" format as an error and edit the Sequence Listing to show each amino acid line in full, with the proper amino acid numbering underneath.

Example(s)

None.

Sequence Listing - When Lengthy Sequence Listing is to be Published at www.seqdata.uspto.gov

These instructions for the processing of lengthy Sequence Listings in patent application publications are effective as of December 13, 2001.

A lengthy Sequence Listing is defined as one that is 600 KB or more in size.

Lengthy Sequence Listings will not be published as part of the specifications of patent application publications. Instead, each such lengthy Sequence Listing will be separately published as an ASCII text file on the USPTO's sequence publication site. In place of the lengthy Sequence Listing, the specification will show a table containing the heading SEQUENCE LISTING plus a standardized statement, which includes the URL for the lengthy Sequence Listing.

The following processing steps are applicable to applications entering eighteen-month (pre-grant) publication processing:

(1) The USPTO will do the following:

(a) Identify each lengthy Sequence Listing (as defined above).

(b) Modify the computer readable form (CRF) of the lengthy Sequence Listing by removing certain bibliographic fields so that the only remaining bibliographic fields are <140> Current Application Number and <160> Number of SEQ ID Nos. (or the corresponding fields in an "old-style" Sequence Listing).

(c) Export a tape of the modified CRF to the publication database contractor.

(2) The publication database contractor will do the following:

(a) Insert the SEQUENCE LISTING table into the specification in accordance with the instructions shown below under the heading **SEQUENCE LISTING Table in Specification (Red Book and Yellow Book)**.

(b) Provide the sequence publication site's project manager (via e-mail to robert.wax@uspto.gov) with the following three items of information about each lengthy Sequence Listing:

- application number
- publication number of patent application publication

- publication date of patent application publication

(c) Duplicate the modified CRF and attach the duplicate as a separate ASCII file at the end of the Red Book tape for the weekly publication batch (Application Red Book deliverable). The weekly Application Red Book deliverable will serve as the source for the lengthy Sequence Listings that the USPTO will load onto the Publication Site for Issue and Published Sequences (PSIPS). The contents of the weekly Application Red Book deliverable will include the following: manifest.xml, open-index.xml, DTDs, entities, individual data files, individual supplemental listing files.

(d) Place the modified CRF on a properly labeled compact disc (CD) in accordance with the instructions shown below under the side-heading ***disc label*** and under the side-heading ***disc content***, and distribute a copy of the compact disc as follows:

- One CD copy (the "OPR working copy") will be delivered to the USPTO's Office of Public Records (OPR), Document Services Division. For address and other information, see the information shown below under the side-heading ***number of copies of disc*** and under the side-heading ***OPR working copy of disc***.

If the USPTO exports a Sequence Listing smaller than 600KB in size and therefore not subject to these interim procedures, and if the Sequence Listing as captured by the publication database contractor expands beyond 600KB in size, then the publication database contractor will request that the USPTO (STIC Systems Branch) re-export the Sequence Listing as a lengthy Sequence Listing in accordance with the above procedures.

■ SEQUENCE LISTING Table in Specification (Red Book and Yellow Book)

See Step **(2)(a)** above.

The lengthy Sequence Listing will not be included as part of the specification in the Red Book (XML) and Yellow Book (photocomposed image) versions of the patent application publication. In place of the lengthy Sequence Listing, the patent application publication's specification (both Red Book and Yellow Book) will show a table containing the uppercase heading SEQUENCE LISTING and the uppercase/lowercase standardized statement beginning The patent application contains a …, as presented in the example below. The table will be published as the last element in the specification.

The table's standardized statement will contain a URL. The DocID within the URL will be the patent application publication number (the four-digit year plus the seven-digit sequential number with leading zeros). The US prefix will not appear in the DocID. The patent application publication's kind code will not appear in the URL.

The heading SEQUENCE LISTING will be centered at the beginning of the photocomposed table. The table will be shown in 9-point Times New Roman in the style presented in the example below,that is, in a single-column format across the entire photocomposed page, preceded by a horizontal line and followed by a horizontal line.

[0089] As shown in Table 1, a peptide separated as Peak 4 of the peptides produced in the reaction mixture was found to be the unreacted substrate peptide. The molecular weight of the peptide contained in peak 3 was identical to the molecular weight of a peptide resulting from a formyl release from the substrate peptide.

[0090] The amino terminal protecting group-releasing enzyme of the present invention exhibits an amino terminal protecting group releasing activity on tow or more kinds of protecting groups. In addition, according to the present invention, there is provided a method for removing an amino terminal protecting group of a peptide using the enzyme. The enzyme is useful for an analysis of an amino acid sequence of a peptide, particularly a protein or peptide of which amino terminal is blocked by unconfirmed protecting groups. The present invention also provides a DNA encoding the enzyme, and a method for filler filler filler filler filler filler producing the above enzyme. An N-terminal acetylated amino terminal protecting group releasing enzyme, the enzyme prepared by altering the DNA, is useful, since the enzyme does not undergo Edman degradation, so that particularly in the method for analysis of the amino acid sequence using Edman degradation, information of the amino acid sequence derived from the enzyme does not result in noise.

SEQUENCE LISTING

The patent application contains a lengthy "Sequence Listing" section. A copy of the "Sequence Listing" is available in electronic form from the USPTO web site (http://seqdata.uspto.gov/sequence.html?DocID=20017654321). An electronic copy of the "Sequence Listing" will also be available from the USPTO upon request and payment of the fee set forth in 37 CFR 1.19(b)(3).

What is claimed is:

1. An purified amino terminal protecting group-releasing enzyme from Pyrococcus characterized in that said enzyme possesses an activity for releasing a protecting group by acting on a peptide of which amino terminal is blocked by the filler filler filler protecting group (hereinafter abbreviated as a term "amino terminal protecting group-releasing activity"), and exhibits said activity for two or more protecting groups selected from the group consisting of acetyl group, pyroglutamyl group, formyl group and myristol group.

2. The enzyme according to claim **1**, wherein the enzyme further possesses an amino peptidase activity.

■ Compact Disc Products

disc label : See Step **(2)(d)** above. The publication database contractor will repeat the following information in 12-point Times New Roman Bold around the circumference of the compact disc:

U.S. Patent & Trademark Office * Alexandria, VA 22313-1450 *

The publication database contractor will print the following label information in 12-point Times New Roman Bold in the center portion of the compact disc:

Line 1	**Sequence Listing for**
Line 2	**U.S. Patent Application Publication**
Line 3	patent application publication number (masthead version, including **US** and kind code)
Line 4	publication date (masthead version)
Line 5	**Disc _ of _** indication

Each line will be centered with respect to the other lines. Lines 1 through 4 will be printed above the CD hole. The USPTO logo will be printed below the CD hole. Line 5 will be printed below the USPTO logo.

Example:

Sequence Listing for
U.S. Patent Application Publication
US 2003/0004321 A1
Jan. 16, 2003
--- CD hole ---
--- USPTO logo ---
Disc 1 of 1

disc content : See Step **(2)(d)** above. The publication database contractor will include the following files on the compact disc:

- **readme.txt file** which repeats Lines 1 through 4 of the disc label. If there are multiple discs, the identical readme.txt file will appear in each disc.

- **disc-id.txt file** which repeats Line 5 of the disc label.

- **CRF** of the lengthy Sequence Listing. The file name should include the document number and the publication date. For example:

  US20030004321-20030116.SEQ

  If the CRF does not fit onto one disc, the portion of the CRF on each disc will require a unique file name by way of the addition of a hyphen and the disc number. For example:

  US20030004321-20030116-1.SEQ
  US20030004321-20030116-2.SEQ

number of copies of disc : See Step **(2)(d)** above. When the publication is a patent application publication, the publication database contractor will produce one (1) copy of the compact disc:

- ***OPR working copy of disc :*** See Step **(2)(d)** above. The publication database contractor will deliver a copy of the compact disc to the USPTO's Office of Public Records (OPR), Document Services Division. The OPR working copy will be used to fill public orders for copies of the lengthy Sequence Listing. The publication database contractor will address the OPR working copy of the disc as follows:

Office of Public Records
Document Services Division
Crystal Gateway 4, Suite 400

Claims

Data Source

The claims will be captured from the PACR/IFW image source or from the EFS source (non-ICE or ICE 5.1).

There must be at least one claim.

PACR/IFW image source:

When the data source for the claims is a PACR/IFW image file:

when multiple sets of claims are indexed under* claims.** The publication database contractor will compare the left- or top-margin endorsements on the sets of claims and will capture the set of claims with the latest mail date, even if the earlier set(s) are not identical in content to the set with the latest mail date. In ***Section I. OVERVIEW OF DATA PREPARATION, **A. Data Sources**, see under the heading **when PACR file shows multiple versions of abstract, drawing(s), specification, claim(s)**.

***when no claims are indexed under* claims.** If no claims whatsoever have been indexed under claims, the publication database contractor will look to see if claims have been indexed under preliminary amendments, in which situation the set of claims indexed under preliminary amendments will be captured, and if more than one set of claims is indexed under preliminary amendments then the set with the *earliest* mail date will be captured. If at least one claim is indexed under claims, any additional claims that are indexed under preliminary amendments will not be captured.

***when a set of claims is indexed under* claims *and a set of claims is indexed under* specification.** The publication database contractor will capture the set of claims indexed under claims, and will not capture the set of claims indexed under specification, even if the two sets are not identical in content.

EFS non-ICE source:

for example:

```
<claims>

   <heading id="h5">CLAIMS</heading>

      <claim id="c1" number="1">
         <claim-text>
            A door attached to a doorframe by means of metal hinges
            thereby facilitating the entering and exiting of a
            building, room, or the like.
         </claim-text>

      <claim id="c2" number="2">
         <claim-text>
```

```
            The door of claim 1 with a window, peephole, or the
            like.
         </claim-text>

      <claim id="3" number="3">
         <claim-text>
            The door of claim 1 with a separate wedge which may be
            placed between the bottom of the door and the floor in
            order to hold the door in a fixed open or semi-open
            position.
         </claim-text>

</claims>
```

EFS ICE 5.1 source:

for example:

```
<claims id="CLAIMS">

   <claim id="c1" num="1">
      <claim-text>
         A pharmaceutical formulation for treating a student
         suffering from ignorance and related educational
         deficiencies comprising smart pills for consumption in a
         dosage sufficient to treat said deficiencies.
      </claim-text>

   <claim-id="c2" num="2">
      <claim-text>
         The formulation of <claim-ref idref="c1">claim 1</claim-
         ref> in which said smart pills are artificially flavored.
      </claim-text>

   <claim-id="c3" num="3">
      <claim-text>
         The formulation of <claim-ref idref="c1">claim 1</claim-
         ref> in which said smart pills are embedded in candy, gum,
         or the like.
      </claim-text>

</claims>
```

Pre-Capture Verification

criteria for claim numbers. The publication database contractor will capture the claim number in accordance with these criteria:

i. **Each claim number must begin with an Arabic numeral.** When punctuation precedes the Arabic numeral in the source, the publication database contractor will not capture that punctuation as part of the claim number. However, any

punctuation, which follows the Arabic numeral, will be captured as part of the claim number. For example:

`(3) The device …`	*would be captured as*	**3)** The device …

exceptions to criterion i. See below under the side-heading ***when claim number begins with an alphabetic character instead of an Arabic numeral*** and under the side-heading ***when claim number contains no Arabic numeral***.

ii. Each claim number must end with a space. When the source shows no space between the claim number and the beginning of the claim, the publication database contractor will provide the space. For example:

`3.The device …`	*would be captured as*	**3.** The device …

iii. Between the initial Arabic numeral and the space, any number or letter or punctuation is valid. Except as described in **i** and **ii** above, the publication database contractor will capture the claim number as it is shown in the source. For example:

`3. The device …`	*would be captured as*	**3.** The device …
`3 The device …`	*would be captured as*	**3** The device …
`3/ The device …`	*would be captured as*	**3/** The device …
`3- The device …`	*would be captured as*	**3-** The device …
`3a. The device …`	*would be captured as*	**3a.** The device …
`3(A) The device …`	*would be captured as*	**3(A)** The device …
`3a-1. The device …`	*would be captured as*	**3a-1.** The device …
`3-A The device …`	*would be captured as*	**3-A** The device …

<claim-id> in Application Red Book. The <claim-id> will reflect the claim number as provided by the source and as captured in accordance with criteria **i**, **ii**, and **iii**, except as follows:

1. Each `<claim-id>` must be unique. (See the information under the side-heading ***when multiple claims share the same claim number***.)

2. The `<claim-id>` will consist of the prefix "CLM-" plus at least five characters, padded with up to four leading zeros. If more than five characters follow the "CLM-" prefix, there will be no leading zero.

3. The first of the five characters after the prefix "CLM-" must be numeric. (For exceptions, see the information under the side-heading ***when claim number begins with an alphabetic character instead of an Arabic numeral*** and under the side-heading ***when claim number contains no Arabic numeral***.)

4. The standard period used by the source to mark the end of the claim number will not be included in the <claim-id>, and the same applies to other punctuation marks, such as – or /, that the source uses merely to mark the end of the claim number.

5. As for punctuation used in the source to frame or set off an alphabetic character, Roman numeral, etc., when such punctuation is a period, hyphen, or underscore, it will appear in the <claim-id>. However, when such punctuation is a parenthesis, slash, or bracket, it will be converted to an underscore in the <claim-id>.*

* Each character within the <claim-id> must be a so-called "name character" (numeric, alpha, period, hyphen, underscore). Parentheses, slashes, and brackets are not "name characters," so each must be converted to a "name character" before it can appear in a <claim-id>.

Examples:

claim number in source	captured claim number	<claim-id>
3.	**3.** The device …	CLM-00003
3A.	**3A.** The device …	CLM-0003A
3/	**3/** The device …	CLM-00003
3(a)	**3(a)** The device …	CLM-03_a_
3-a.	**3-a.** The device …	CLM-003-a
3(ii)	**3(ii)** The device …	CLM-3_ii_
(3)	**3)** The device …	CLM-00003
3(a)(i)	**3(a)(i)** The device…	CLM-3_a_ _i_

when claim numbers are shown in a range. The range (two numbers connected by a hyphen or dash) will be captured as the claim number in accordance with criteria **i**, **ii**, and **iii**, and the <claim-id> also will show the range. For example:

1+5. (Canceled.)	*would be captured as*	**1-5.** (Canceled.)	*with id* CLM-001-5
6. The device …	*would be captured as*	**6.** The device …	*with id* CLM-00006

when a gap appears in the sequence of claim numbers. Each claim number will be captured in accordance with criteria **i**, **ii**, and **iii**, and each <claim-id> will reflect the claim number. For example:

1. The device …	*would be captured as*	**1.** The device …	*with id* CLM-00001
3. The device …	*would be captured as*	**3.** The device …	*with id* CLM-00003
4. The device …	*would be captured as*	**4.** The device …	*with id* CLM-00004

when multiple claims share the same claim number. No two claims can have the same <claim-id>. If multiple claims share the same claim number, the publication database contractor will make the second (or succeeding) <claim-id> unique by suffixing a hyphen and a sequential number, but will otherwise publish the claim. As a result, any duplicate claims that were submitted by the applicant will be published, each with a distinct <claim-id> as shown below. Each claim number, however, will be captured in accordance with criteria **i**, **ii**, and **iii**, and all repetitions of a claim number will be captured. For example:

1. The device …	*would be captured as*	**1.** The device …	*with id*	CLM-00001
2. The device …	*would be captured as*	**2.** The device …	*with id*	CLM-00002
2. The device …	*would be captured as*	**2.** The device …	*with id*	CLM-00002-1
3. The device …	*would be captured as*	**3.** The device …	*with id*	CLM-00003

when a claim does not have a number. When the source shows an un-numbered claim, the text of the un-numbered claim will be included as part of the text of the preceding numbered claim. For example:

```
1. The device …
2. The device comprising:
      i)  a bed support means in a horizontal position;
      ii) a bed support means in a vertical position.
   The device comprising:
      i)  a side support means in a horizontal position;
      ii)  a side support means in a vertical position.
3. The device …
```

Claim 2 would be captured and published as follows:

2. The device comprising:
i) a bed support means in a horizontal position;
ii) a bed support means in a vertical position.
The device comprising:
i) a side support means in a horizontal position;
ii) a side support means in a vertical position.

claim numbering when data source is EFS:

➔ **EFS (non-ICE or ICE 5.1) claim source in which "claim id" value and "number" ("num") value do indicate the same number.** The publication database contractor will capture and publish the claim number.

EFS source

```
<c1aim id="c1" num="1"><claim-text>A device . . .
```

<claim-id> in Application Red Book	composed claim
CLM-00001	**1.** A device …

➔ **EFS (non-ICE or ICE 5.1) claim source when "claim id" value and "number" ("num") value do not indicate the same number.** The publication database contractor

will capture and publish the claim number that is indicated in the "number" ("num") value.

EFS source

```
<c1aim id="c39" num="40"><claim-text>A device . . .
```

<claim-id> in Application Red Book	composed claim
CLM-00040	**40.** A device …

➔ **when claim source is PACR/IFW image of EFS printout and there is no claim number at the beginning of the claim text.** The publication database contractor will insert the claim number (and period) into the text of the claim, using the claim number that is shown as the EFS claim id.

PACR/IFW source (image of printout of EFS submission)

```
[c1]  A device . . .
```

<claim-id> in Application Red Book	composed claim
CLM-00001	**1.** A device …

claim numbering when data source is PACR image of paper application in which claims are not numbered:

➔ **general rule.** If the PACR image of a paper application shows that the applicant did not number the claims, then the publication database contractor will locate the beginning of the first or sole claim and will insert **1** (and period) as the claim number. The publication database contractor will not number any claim(s) that may follow the first claim. In effect, the publication database contractor will treat the entire set of un-numbered claims as a single claim numbered **1**.

➔ 1st paper-filed example – utility claims not numbered by applicant

PACR image source

```
I claim:
   A folding chair comprising:
a hollow, thermally insulated seat member,
a back member pivotally mounted to said seat member, and
a door pivotally mounted on said seat member.
   A chair as set forth in claim 1 wherein a U-shaped handle is attached
to said back member.
   A chair as set forth in claim 1 and further comprising a liner
covering the interior of the storage compartment.
```

<claim-id> in Application Red Book

CLM-00001

published (composed) claim

I claim:
1. A folding chair comprising:
a hollow, thermally insulated seat member,
a back member pivotally mounted to said seat member, and
a door pivotally mounted on said seat member.
A chair as set forth in claim **1** wherein a U-shaped handle is attached to said back member.
A chair as set forth in claim **1** and further comprising a liner covering the interior of the storage compartment.

➔ 2nd paper-filed example – utility claims not numbered by applicant

PACR image source

What I claim as my invention is the combination of the five points listed above. Specifically, I claim the origination of a variable defenestration device modified according to attributes of the defenestration subject.

I also claim originality for the ability of the invention to remember previous defenestration information so that this information, at the user's option, is entered automatically when it is needed in a new defenestration.

<claim-id> in Application Red Book

CLM-00001

published (composed) claim

1. What I claim as my invention is the combination of the five points listed above. Specifically, I claim the origination of a variable defenestration device modified according to attributes of the defenestration subject.
I also claim originality for the ability of the invention to remember previous defenestration information so that this information, at the user's option, is entered automatically when it is needed in a new defenestration.

➔ 3rd paper-filed example – plant claim not numbered by applicant

PACR image source

It is claimed:

A new and distinct variety of rose plant of the hybrid tea class, substantially as shown and described, characterized particularly by bright signal red to scarlet red flowers with visible veining which are long-lasting on the plant and as cut flowers.

<claim-id> in Application Red Book

CLM-00001

published (composed) claim

It is claimed:
1. A new and distinct variety of rose plant of the hybrid tea class, substantially as shown and described, characterized particularly by bright signal red to scarlet red flowers with visible veining which are long-lasting on the plant and as cut flowers.

when a claim indexed under preliminary amendments is being captured. Under **Data Source** above, see ***when no claims are indexed under claims***. When a claim indexed under **preliminary amendments** is being captured, and the claim begins with the word "Amended" in parentheses/brackets or the word "Canceled" or "Cancelled" in parentheses/brackets, then the text of the claim will be captured to include the parenthetical/bracketed word. For example:

PACR image source

1. (Amended) A pre-curing apparatus … .
2. (Canceled) A pre-curing apparatus … .

Application Red Book

```
<claim-id="CLM-00001">
<claim-text><highlight><bold>1</bold></highlight>.
(Amended) A pre-curing apparatus … .
</claim-text>
</claim>

<claim-id="CLM-00002">
<claim-text><highlight><bold>2</bold></highlight>.
(Canceled) A pre-curing apparatus … .
</claim-text>
</claim>
```

Application Yellow Book

1. (Amended) A pre-curing apparatus … .
2. (Canceled) A pre-curing apparatus … .

when claim number begins with an alphabetic character instead of an Arabic numeral. Claim number criterion **i** says that "Each claim number must begin

with an Arabic numeral." However, it sometimes happens that claims are given numbers like A1, A2, A3, etc., with an alphabetic character in the first position. In such an instance the five-position <claim-id> in Application Red Book will reflect this reversal of the standard order, as shown in the example below:

PACR image source

```
A1.  A pre-curing apparatus ...
A2.  A pre-curing apparatus ...
```

Application Red Book

```
<claim-id="CLM-000A1">
<claim-text>A<highlight><bold>1</bold></highlight>.  A
pre-curing apparatus ...
</claim-text>
</claim>

<claim-id="CLM-000A2">
<claim-text>A<highlight><bold>2</bold></highlight>.  A
pre-curing apparatus ...
</claim-text>
</claim>
```

Application Yellow Book

A1. A pre-curing apparatus . . .
A2. A pre-curing apparatus . . .

when claim number contains no Arabic numeral. If there are no Arabic numerals in the claim identifiers,for example, the claims are identified as A, B, C, D, etc., or I, II, III, etc.,then each five-position <claim-id> in Application Red Book will show the alphabetic designation with leading zeros. See 1st example below. The <claim-id> will go beyond the five positions (with no leading zeros) when the alphabetic claim designation contains more than five characters. See 2nd example below.

1st example:

PACR image source

```
A)  A folding chair ...
B)  A folding chair ...
```

Application Red Book

```
<claim-id="CLM-0000A">
<claim-text>A) A folding chair ... </claim-text>
```

```
</claim>

<claim-id=”CLM-0000B”>
<claim-text>B) A folding chair ... </claim-text>
</claim>
```

Application Yellow Book

A) A folding chair . . .
B) A folding chair . . .

2nd example:

PACR image source

```
XXXVIII. A mousetrap with ...
```

Application Red Book

```
<claim-id="CLM-XXXVIII">
<claim-text>> XXXVIII. A mousetrap with ... </claim-text>
</claim>
```

Application Yellow Book

XXXVIII. A mousetrap with . . .

Composition

Location

The following order will be observed:

- specification text [*required*]
- “large table(s)” appendix from CD or EFS source[*if present*]
- Sequence Listing from CRF [*if present*]
- claim(s) text [*required*]

Style

Here in ***Section V. SPECIFICATION AND CLAIMS***, see the information under the heading ***OVERVIEW OF SPECIFICATION AND CLAIMS***, particularly the information under **Claims** in **Style Guidelines for Specification and Claims**.

If a claim statement (such as I claim: or We claim:) is present in the source, it will be captured and published immediately prior to the first claim. If no claim statement is present, no claims statement will be captured.

The claim statement, if present, will not be numbered as a paragraph.

The claims themselves will not be numbered as paragraphs.

Example(s)

See ***Section VI. SAMPLE DOCUMENTS***.

Section VI. Sample Documents

Sample Doc. No.	Kind	Contents of Sample
0011111	P1	front page + specification/claim + drawing
0022222	P4	front page only
0033333	P9	front page only
0044444	A1	front page + drawings + specification/claims
0055555	A1	front page only [U.S. National Stage application]
0066666	A1	front page only [Rule 47 application]
0077777	A2	front page + first page of specification [with CWU]
0088888	A9	front page only

Sample 1: Plant Patent Application Publication

Front Page + Specification/Claim + Drawing

US20030011111 P1

(19) **United States**

(12) **Plant Patent Application Publication**

Prose

(10) **Pub. No.: US 2003/0011111 P1**

(43) **Pub. Date: Feb. 20, 2003**

(54) **HYBRID TEA ROSE PLANT**

(50) Latin Name: ***Rosa odorata***
Varietal Denomination: **Eula Vee**

(75) Inventor: **Dick C. Prose**, Jefferson, MS (US)

Correspondence Address:
Gavin Stevens
Temple and Drake
9999 Courthouse Square
Jefferson, MS 00000-0000 (US)

(73) Assignee: **Emily's Roses**, Jefferson, MS (US)

(21) Appl. No.: **09/000,000**

(22) Filed: **Aug. 21, 2001**

Publication Classification

(51) **Int. Cl.**[7] ……..…..……..…..**X00X 99/00**

(52) **U.S. Cl**. ……..……..….. **Plt./00**

(57) **ABSTRACT**

A new variety of hybrid tea rose plant having flowers of brilliant signal red to scarlet red coloring and visible veining.

[0001] The present invention relates to a new and distinct variety of rose plant of the hybrid tea rose class, which was originated by my crossing as seed and pollen parents unnamed, unpatented and unreleased seedlings of my creation. The varietal denomination of the new variety is 'Eula Vee.'

[0002] Among the novel characteristics possessed by this new variety which distinguishes it from its parents and all other varieties of which I am aware are many petaled blooms of bright red, non-fading, coloring borne on very long stems and a vigorous, free branching plant with abundant foliage and good disease resistance. Flowers are exceptionally long lasting on the plant and as a cut flower. Asexual reproduction by budding of the new variety as performed in Mississippi, U.S.A., shows that the foregoing and other characteristics come true to form and are established and transmitted through succeeding generations.

[0003] The new and improved rose variety which I have developed is an unusually fine hybrid tea rose with blooms of good form displayed on a vigorous, upright, free branching plant with abundant foliage. The flowers are of heavy petalage but open well. The brilliant red coloring holds well upon aging, although outer petals may lighten slightly.

[0004] The seed and pollen parents both differ from the new variety in growth habit with both not being as vigorous or producing as good or as large a plant. The new rose is more vigorous and grows taller than both parents. The bright signal red and scarlet red flower coloring of the new rose is also different.

[0005] The accompanying drawing shows typical specimens of the vegetative growth and flowers of the new variety in different stages of development and as depicted in color as nearly true as it is reasonably possible to make the same in a color illustration of this character.

[0006] The following is a detailed description of my new variety, with color terminology in accordance with the Royal Horticultural Society Color Chart (R.H.S.C.C.). The terminology used in color description herein refers to plate numbers in the aforementioned color chart, e.g., "46A" is plate 46A of the Royal Horticultural Society Color Chart.

[0007] Parentage: Seedling.

[0008] *Seed parent*.,Unnamed, unreleased seedling.

[0009] *Pollen parent*.,Unnamed, unreleased seedling.

[0010] Class: Hybrid tea.

[0011] The following observations are made of specimens grown outdoors in Mississippi, U.S.A., during the month of May.

1. FLOWER

[0012] A. Bud:

[0013] (1) *Size*.,Medium.

[0014] (2) *Form*.,Pointed, oval.

[0015] (3) *Color*., As calyx breaks and when sepals first divide,46A. When petals begin to unfurl,46A.

[0016] (4) *Sepals*.,Simple, with foliacious appendages extending beyond tip of bud.

[0017] (5) *Peduncle*.,Length,medium. Aspect, conspicuous. Strength,erect. Color, reddish green at first blooming becoming green 138B.

[0018] B. Bloom:

[0019] (1) *Size*.,Average size when fully expanded, about 4½ inches to 5 inches.

[0020] (2) *Borne*.,Singly and in clusters of 2 to 4 blooms.

[0021] (3) *Form*.,Urn shaped to cupped becoming flat upon opening.

[0022] (4) *Petalage*.,Number of petals up on normal conditions,about 46 to 50.

[0023] (5) *Color*.,Bud color begins as currant red 46A. As petals unfurl to ¼-½ open bloom, color lightens to signal red 43A and scarlet 43B. Higher density coloring effect appears at center of partially opened blooms due to concentration of petals. As blooms open further, outer petals appear to lighten to 42B and 42C. Individual petal display marked veining,

becoming more evident in color contrast as petals age and lighten. Occasional white streaking is seen on outer petals.

[0024] C. Petals:

[0025] (1) *Texture*.,Thick.

[0026] (2) *Appearance*.,Leathery, top surface satiny.

[0027] (3) *Form*.,Slightly rounded.

[0028] (4) *Arrangement*.,Slightly irregular.

[0029] (5) *Petaloids in center*.,Few.

[0030] (6) *Persistence*.,Drop off cleanly.

[0031] (7) *Fragrance*.,Slight

[0032] (8) *Lasting quality*.,3 to 5 days on plant and as cut flower.

2. REPRODUCTIVE ORGANS

[0033] A. Stamens, filaments and anthers:

[0034] (1) *Arrangement*. , Stamens irregularly about pistils.

[0035] (2) *Color*. , Short filaments, yellow base, reddish most with yellow anthers.

[0036] B. Pollen: Color,yellow.

[0037] C. Styles: Even, medium, bunched.

[0038] D. Stigmas: Color,light yellow.

[0039] E. Hips: None observed.

3. PLANT

[0040] A. Form: Upright, tall.

[0041] B. Growth: Vigorous, free branching.

[0042] C. Foliage: Compound 3 to 7 leaflets.

[0043] (1) *Size*.,Medium.

[0044] (2) *Quantity*.,Abundant.

[0045] (3) *Color*.,New foliage: Reddish colored 59A with green tones becoming green upon maturing (136C). Old foliage: Upper side,near to 136A. Under side: near to 191A.

[0046] (4) *Shape*.,Ovoid, base round.

[0047] (5) *Texture*.,Leathery.

[0048] (6) *Edge*.,Serrated.

[0049] (7) *Serration*.,Simple.

[0050] (8) *Leaf stem*.,Color,near to 138A. Under side, 138B.

[0051] (9) *Stipules*.,Long.

[0052] (10) *Resistance to disease*. , Mildew , good. Rust, good.

[0053] D. Wood:

[0054] (1) *New wood*.,Color,near 138A. Bark, smooth, shiny.

[0055] (2) *Old wood*.,Color,near 137A. Bark, smooth, shiny.

[0056] E. Thorns:

[0057] (1) *Thorns*.,Quantity (main stalk),Ordinary. On laterals from stalk,few. Form,straight. Length ,medium. Color,138B. Position, scattered.

[0058] (2) *Prickles*.,Few.

[0059] F. Winter hardiness: Good winter hardiness.

I claim:

1. A new and distinct variety of rose plant of the hybrid tea class, substantially as shown and described, characterized particularly by bright signal red to scarlet red flowers with visible veining which are long lasting on the plant and as cut flowers.

* * * * *

Sample 2: Plant Patent Application Publication Republication

Front Page only

US20030022222 P4

(19) **United States**
(12) **Plant Patent Application Publication**
Kinbote

(10) **Pub. No.: US 2003/0022222 P4**
(43) **Pub. Date: Feb. 20, 2003**
REPUBLICATION

(54) **CARNATION PLANT NAMED 'DOLORES AITCH'**

(50) Latin Name: ***Dianthus caryophyllus***
Varietal Denomination: **Dolores Aitch**

(76) Inventor: **Charles V. Kinbote**, Adaville, CA (US)

Correspondence Address:
Charles V. Kinbote
9999 Montreux Ave.
Adaville, CA 00000-0000 (US)

(21) Appl. No.: **09/000,000**

(22) Filed: **May 14, 2001**

Prior Publication Data

(65) US 2002/0000000 P1 Nov. 21, 2002

Publication Classification

(51) **Int. Cl.**[7] **X00X 99/00**
(52) **U.S. Cl.** **Plt./00**

(57) **ABSTRACT**

A new variety of spray type or miniature carnation plant distinguished by its profuse production of well formed variegated pink and white flowers borne on strong stems of relatively short length; by its vigorous and upright growth habit and abundant foliage; and by its continuous flowering habit with small, fragrant and long lasting blooms.

[0001] Latin Name: *Dianthus caryophyllus*.
[0002] Variety: Dolores Aitch.

BACKGROUND OF THE INVENTION

[0003] This carnation cultivar originated as a sport of Van Veen (P.P. 0000) and was discovered by me at my nursery in Adaville, Calif. The lovely pink coloring of the flower led me to propagate this sport at my nursery by cuttings and observation of the resulting plants, their growth and blooming habits, and the longevity and fragrance of the blooms has caused me to begin production of the plant for the commercial market. Propagation of this plant is now being done by cuttings at Adaville, Calif., and many generations of this plant have demonstrated that its distinctive characteristics hold true and appear to be firmly fixed.

DESCRIPTION OF THE DRAWING

[0004] My new variety of carnation plant is illustrated by the accompanying full color photographic drawing which shows a spray of fully opened flowers and several stages of buds, the color rendition being as nearly true as it is reasonably possible to obtain by conventional and professional photographic procedures.

DESCRIPTION OF THE NEW PLANT

[0005] The following is a detailed description of my new carnation cultivar based upon observations made of plants grown under conventional greenhouse practices at Adaville, Calif., the color descriptions being according to the R.H.S. Colour Chart published by the Royal Horticultural Society of London, England, in collaboration with the British Colour Council.

THE PLANT

[0006] Origin: Sport
[0007] Parentage: Van Veen (P.P. 0000)
[0008] Classification:
[0009] *Botanic*.,Dianthus.
[0010] *Commercial*.,Miniature Carnation.
[0011] Form: Upright bush.
[0012] Height: Main stems or canes,about 57 cm.
[0013] Growth: Vigorous, strong and upright.
[0014] Branching habit: Moderate side shoots.
[0015] *Leaf size*.,About 8 cm. Long.
[0016] *Shape*.,Lanceolate and pointed.
[0017] *Margin*.,Entire.
[0018] *Texture*.,Smooth.
[0019] *Color*.,Upper side , Greyed Green 191A. Under side , Greyed Green 191A.

THE BUD

[0020] Form: Generally ovoid and pointed.
[0021] Size: About 3 cm. long and 1.5 cm. in diameter.
[0022] Opening rate: Moderate.
[0023] Calyx: Size , 3.5 cm. long; 1.4 cm. in diameter.
[0024] *Shape*.,Elongated with long point.
[0025] *Splitting*.,None.
[0026] *Aspect*.,Smooth.
[0027] Sepals: Shape , Generally oval with mucronate tip.
[0028] *Condition*.,Hooded over bud; upstanding when flowers open.
[0029] *Color*.,Inside and outside,191A.

THE FLOWER

[0030] Blooming habit: Continuous and profusely.
[0031] Size of bloom: Small.

Sample 3: Plant Patent Application Publication
Corrected Publication

Front Page only

US20030033333 P9

(19) United States
(12) Plant Patent Application Publication
Fielding et al.

(10) Pub. No.: US 2003/0033333 P9
(48) Pub. Date: Feb. 20, 2003
CORRECTED PUBLICATION

(54) **CARNATION PLANT NAMED 'SOPHIA WESTERN'**

(50) Latin Name: ***Dianthus caryophyllus***
Varietal Denomination: **Sophia Western**

(75) Inventor: **Henry G. Fielding**, Upper Plye (GB); **Henrietta O. Fielding**, New York, NY (US)

Correspondence Address:
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(73) Assignees: **Fielding's Florist Shop**, Upper Plye (GB); **Fielding Wholesale Florist Co.**, New York, NY (US)

(21) Appl. No.: **09/000,000**

(22) Filed: **May 12, 2001**

Prior Publication Data

(15) Correction of US 2002/0000000 P1 Nov. 21, 2002
See paragraph [0002].
See drawing.

Publication Classification

(51) **Int. Cl.**[7] ……………..…...………………..…..**X00X 99/00**
(52) **U.S. Cl**. ……………..……………………...….. **Plt./00**

(57) **ABSTRACT**

A new variety of carnation plant distinguished by its high production of dark red flowers of a medium size borne on very sturdy and long stems, by its vigorous and much branched growth habit, its continuous flowering from Spring through Autumn, and its relatively long lasting quality as a cut flower.

BACKGROUND OF THE NEW PLANT

[0001] Our new variety of carnation plant was discovered by us in the month of March 1999 as a sport of the carnation variety HF White No. 1 (unpatented) being grown in our greenhouse in Upper Plye, England, for the production of cut flowers. The dark red colouration of the flower caught our attention and because of its attractive size and shape, we took cuttings and reproduced this sport as a new carnation variety. Propagation of this new plant through many generations in Upper Plye, England, has shown commercially advantageous features of growth and flower production which with the flower colour hold true from generation to generation and appear to be firmly fixed. Commercial sale propagation of this new plant is now being carried out by means of cuttings at Upper Plye, England.

DESCRIPTION OF THE DRAWING

[0002] Our new carnation variety is illustrated by the accompanying photographic drawing which in full colour shows a partially opened bud, a newly opened flower, and a fully opened bloom, the flower colour shown being as nearly true as is reasonably possible to obtain by conventional photographic procedures.

DESCRIPTION OF THE NEW PLANT

[0003] The following is a detailed description of this new variety of carnation plant according to observations made in the Summer of 2000 of greenhouse plants grown at Upper Plye, England, under conventional greenhouse practices and procedures.

THE PLANT

[0004] Origin: Sport.
[0005] Parentage: HF White No. 1 (unpatented).
[0006] Classification:
[0007] *Botanic*.,Dianthus.
[0008] *Commercial*.,Carnation for cut flowers.
[0009] Form: Upright tall bush.
[0010] Height: About 135 cm.
[0011] Growth: Vigorous, sturdy and erect.
[0012] *Rate of growth*.,14 weeks to flower.
[0013] Branching: 4 to 5 branches on a principal stem.
[0014] Foliage: Quantity , Abundant with more than 100 leaves.
[0015] *Leaf size*.,Medium to large.
[0016] *Shape of leaf*.,Lanceolate with acuminate apex and entire margin.
[0017] *Ribs*.,A single prominent mid-rib.
[0018] *Colour*.,Upper side,Light bluish-green. Under side , Light green.
[0019] *Petioles*.,None. Leaf is amplexicaul.
[0020] *Leaflets*.,None.

THE BUD

[0021] Size: Large. Diameter , 26 mm. Depth , 40 mm.

Sample 4: Patent Application Publication

Front Page + Drawings +Specification/Claims

US20030044444 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0044444 A1**

Wisdom et al. (43) **Pub. Date: Feb. 20, 2003**

(54) **PORTABLE CHAIR WITH INSULATED SEAT COOLER**

(76) Inventors: **Lars O. Wisdom**, Ellicott City, MD (US); **Nikos Thucydides**, Hyattsville, MD (US); **John J.. Mulligan, Jr.,** Herndon, VA (US); **Marie Louise Thucydides**, Hyattsville, MD (US); **John J. Smith**, Herndon, VA (US)

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(21) Appl. No.: **08/000,000**

(22) Filed: **Mar. 28, 2001**

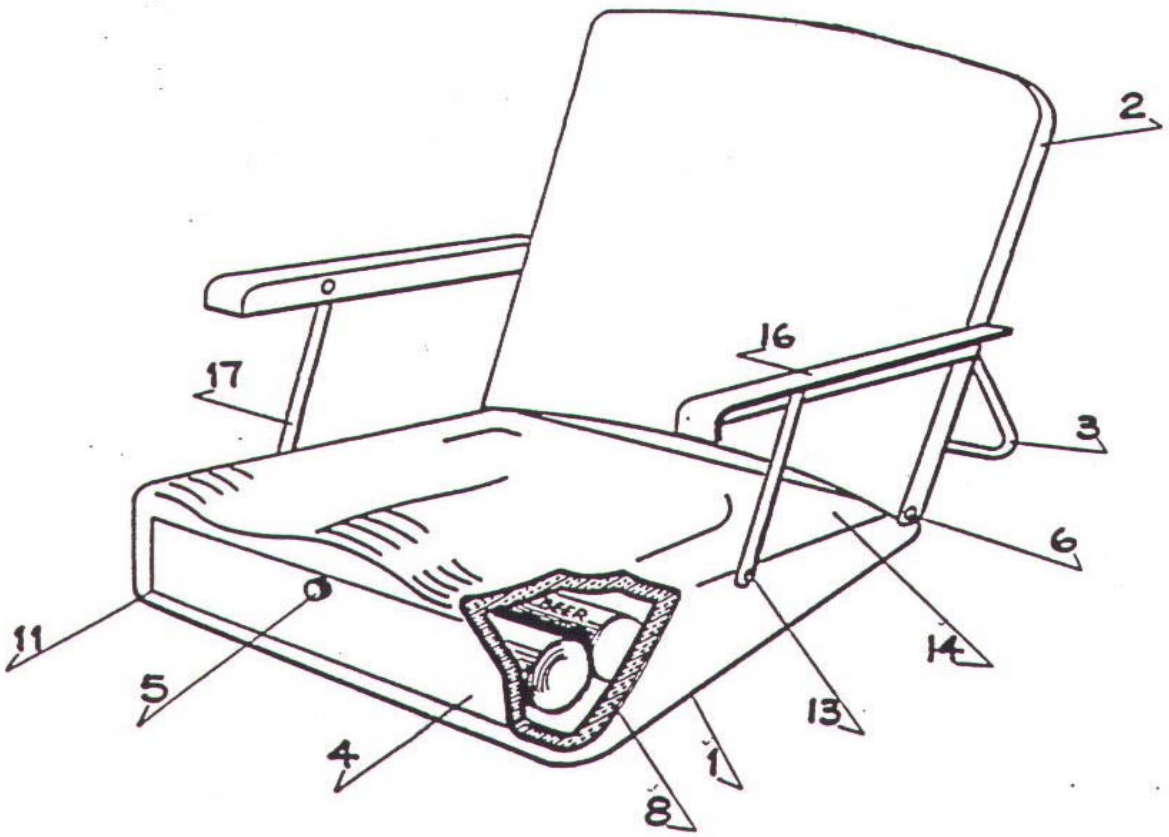
Publication Classification

(51) **Int. Cl.**[7] **X00X 99/00**

(52) **U.S. Cl.** **000/000**

(57) **ABSTRACT**

There is disclosed an ingenious portable folding chair, constructed of molded plastic or the like, provided with a seat having therein a hollow thermally insulated compartment. Said compartment may be lined and may be provided with a locking seat compartment access panel or door which provides sealing of said compartment and access to perishable foodstuffs, canned or bottled beverages, ice, fishing bait, or the like.



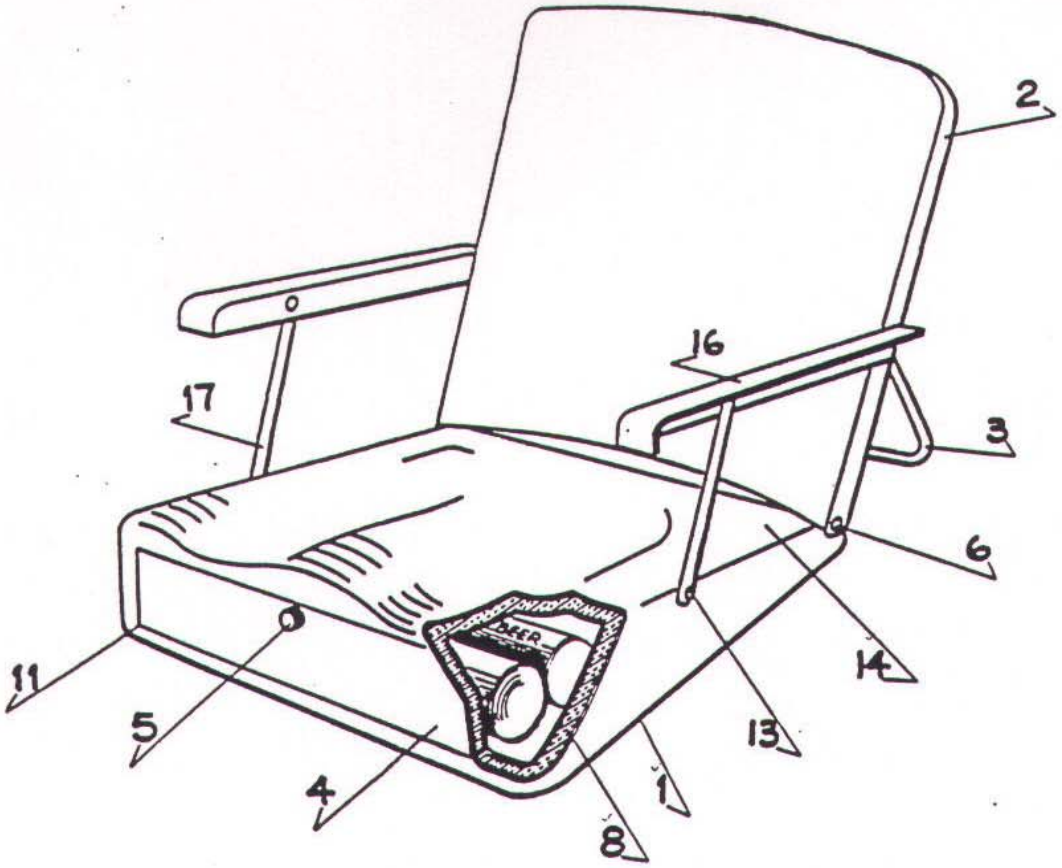


FIG. 1

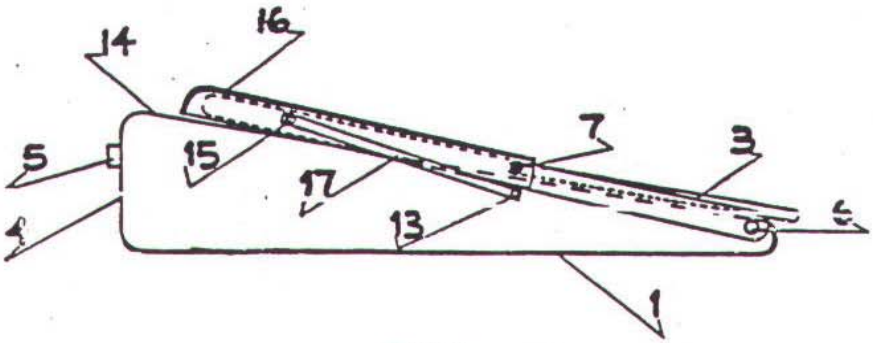


FIG. 2

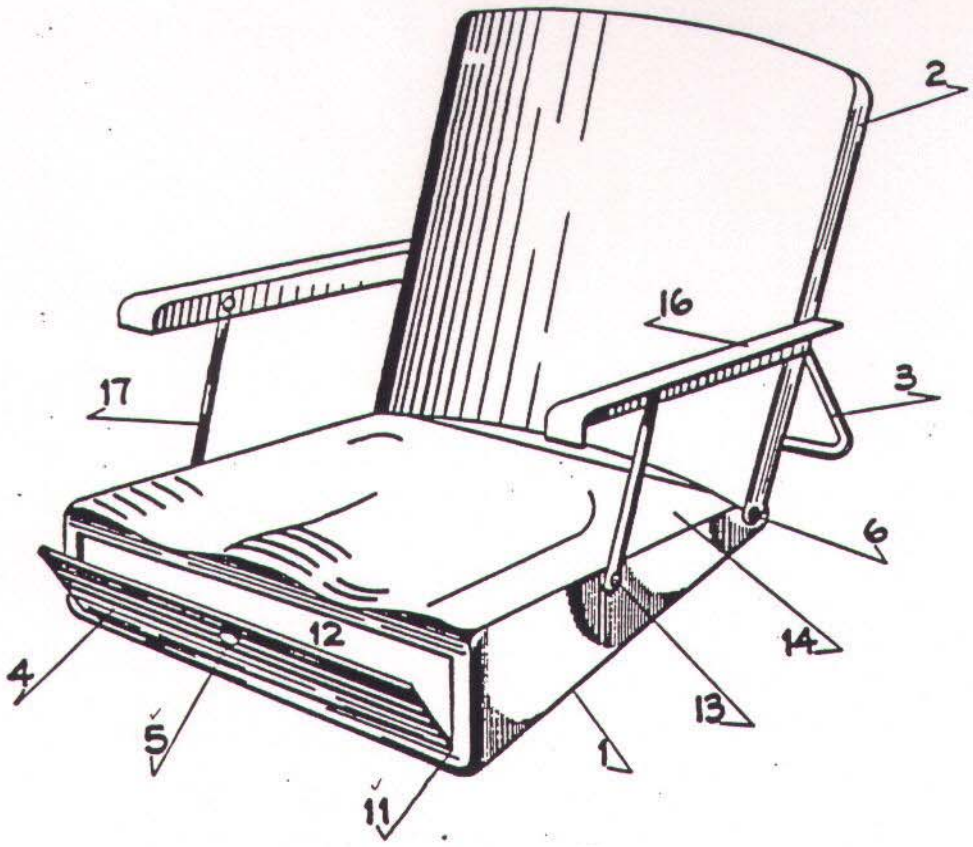


FIG. 3

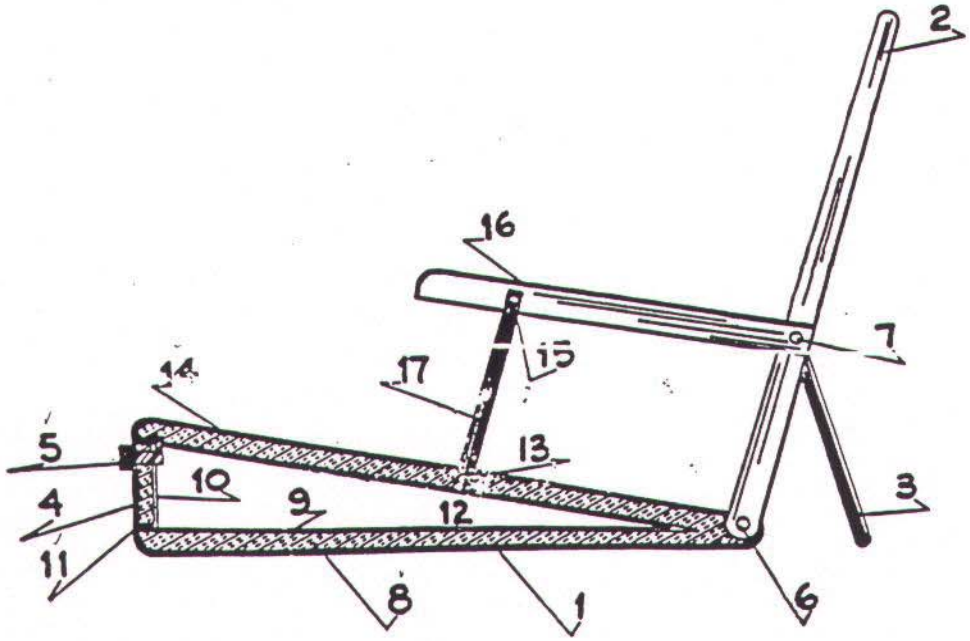


FIG. 4

PORTABLE CHAIR WITH INSULATED SEAT COOLER

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] This invention relates to portable chairs of the picnic or beach variety which may be provided with a locking thermally insulated seat compartment for both carrying and insulating perishable foodstuffs, canned or bottled beverages, ice or the like.

2. Prior Art

[0002] Known folding chairs constructed of tubular aluminum with nylon or canvas covering material or the like are well known. These portable chairs have the virtue of being very light to carry and provide an inexpensive means for comfortable reclining.

[0003] Many conventional chairs open merely to one position and are provided with legs. Some of these chairs include a seat portion and a back portion which is positioned directly on the sand or ground.

[0004] To spend the day at the beach, conventional practice involves using and carrying a comfortable chair, a portable cooler for beverages and lunches, and a container to hold towels and other small articles. This conventional practice is relatively expensive and cumbersome to carry. Known folding chairs have the disadvantage of not possessing any storage facilities which can hold small articles and thermally insulate perishable foodstuffs or bottled beverages.

[0005] A number of alternative means for constructing folding chairs have been proposed to overcome these recognized inadequacies of the conventional chairs. For example, several chairs have been devised with storage capability for beach or camping. Washington et al U.S. Pat. No. 0,000,000 discloses such a beach chair formed of canvas with storage pockets provided on the sides of the seat for accessories. Similarly, Adams U.S. Pat. No. 0,000,000 discloses a folding couch for beach or camping with a fabric sling arrangement for carrying and securing books and other objects.

[0006] Several arrangements have been proposed to provide a beverage or lunch container directly in a folding chair. Jefferson U.S. Pat. No. 0,000,000 discloses a pair of folding seats with a container for holding vacuum bottles and sandwiches. Similarly, Madison U.S. Pat. No. 0,000,000 discloses a portable chair with a seat having therein a hollow thermally insulated container with means to introduce and dispense liquids. Other arrangements have been proposed, including the following:

Monroe, U.S. Pat. No. 0,000,000;
Adams II, U.S. Pat. No. 0,000,000;
Jackson, U.S. Pat. No. 0,000,000;
Van Buren, U.S. Pat. No. 0,000,000.

[0007] Each of these alternatives has certain deficiencies. The chairs with pouches or compartments for carrying objects still require insulating means for perishable foodstuffs, fishing bait, ice or the like and are susceptible to tearing and wear as they are constructed of fabric or canvas. The portable chair in the Jefferson patent still requires insulating means for foodstuffs and the glass vacuum bottles are susceptible to breakage in transport.

[0008] The alternative means proposed by Madison still require insulating and carrying means for perishable foodstuffs and the like. Additionally, this disclosure by Madison requires a wire hook securing device to a supporting plank or the like and may suffer from tipping when utilized on the beach or ground.

SUMMARY OF THE INVENTION

[0009] It is an object of this present invention to provide an adjustable foldable chair of the type as mentioned which overcomes at least some of the aforementioned disadvantages and concurrently therewith provides a thermally insulated storage facility for securing and storing canned or bottled beverages, ice, perishable foodstuffs, fishing bait, or other small objects.

[0010] It will be seen that the present invention overcomes some of these inadequacies by providing a hingedly secured locking access panel, lid, or similar means, to a thermally insulated compartment secured to or incorporated within a lightweight seat and easily accessible to the occupant of the seat.

[0011] One object of the present invention is to provide a new and improved device of the foregoing character which opens to provide a durable comfortable seat elevating the occupant from the ground or sand at the beach, picnics, fishing, or other similar activities.

[0012] A further object is to provide such a new and improved device in which the seat is provided with a collapsible back member. Still another object is to provide a device of the foregoing character having an adjustable folding back rest prop which supports the backrest and adjusts for individual comfort and reclining when the device is opened, prevents tipping of the device when occupied, and provides a convenient handle for carrying the device when it is folded.

[0013] Another object is to provide such a new and improved device which folds compactly for storage or transport and provides a handle for carrying the device. Still another object is to provide such a new and improved device having an insulated container which may be lined and which may be securely attached to or incorporated within the seat portion of the chair so that perishable foodstuffs, ice, canned beverages, fishing bait, or other articles in the container will be conveniently accessible to the occupant of the seat.

[0014] It is a further object to provide a new and improved device in which the seat and backrest members are provided with collapsible armrest members which open to provide arm support and comfort when the device is

opened. Still another object is to provide such a new and improved device which is durable and lightweight. An additional object is to provide such a new and improved device which is easy to manufacture and low in cost.

[0015] These together with other objects and advantages which will become apparent reside in the details of construction and operation as will be more fully described and claimed, reference being made to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout and in which:

BRIEF DESCRIPTION OF THE DRAWINGS

[0016] The invention will hereafter be elucidated with reference to the drawings:

[**0017**] **FIG. 1** is a perspective view of our invention in use with a cutaway front view.

[0018] **FIG. 2** is a detail side view showing our invention as folded.

[0019] **FIG. 3** is a perspective view of our invention in use.

[0020] **FIG. 4** is a detail side view showing our invention in use.

DETAILED DESCRIPTION OF THE INVENTION

[0021] Turning now to the drawings, with particular emphasis to **FIGS. 1** and **4**, it will be seen that the chair of this invention may include a hollow rectangular integrated one-piece seat portion **1** of injection-molded plastic, nylon, or other suitable material, which may be equipped with a front access panel or door **4** of plastic or other suitable material, which can be hingedly connected to the front portion of the seat at **11**.

[0022] The access panel or door **4** may be secured with a manually turning lock **5** of metal, plastic, or similar material which may additionally serve as a knob which may be grasped for opening said access panel. The purpose of the lock being to prevent release of carried items, to prevent theft of said items, and to tightly secure and seal the insulated compartment. The inner or compartment portion of the access panel **4** may be provided with insulating material **8** of plastic, polyurethane foam, or the like and may be provided with a lining material **10** of plastic, thermoplastic, or other suitable material.

[0023] The top portion of the seat **14** may be anatomically molded as shown in **FIG. 3** to the contour of the buttocks to provide added comfort to the occupant of the chair. The seat **14** will automatically adjust to accommodate occupants of different sizes. Furthermore, when the occupant vacates the seat **14**, it will automatically return to its initial position. Additionally, thermal insulating material **8** of polyurethane foam or similar insulating material may be placed directly beneath and inside the top portion of the seat **14** and may also be placed on the inside bottom and insides of the hollow seat compartment. A protective and stiffening liner **9** of plastic, thermoplastic, or similar material, may be placed adjacent to the thermal insulating material **8** to protect the items contained in storage and to define the hollow inner compartment **12**. The entire hollow seat portion may be inexpensively molded in one piece so as to be lightweight, inexpensively made, and easily reinforced to prevent collapse when sat upon.

[0024] A back member **2** of wood, metal, plastic, or other suitable material may be hingedly secured at **6** by means of rivets, screws, or the like, to seat base member **1** whereby the back rest **2** may extend upward and back from the top of the seat portion **14** for use, as in **FIG. 4**, or may be folded upon the top of the seat portion **14** for storage, as in **FIG. 2**.

[0025] A U-shaped back member, back member support prop **3** of tubular aluminum construction, plastic, or other suitable material, may be hingedly secured by rivets, screws, or the like as shown at **7** to back member **2** whereby the support prop **3** may extend back from the seat portion **1** for greater reclining and comfort and additionally to prevent tipping of the device when occupied, or may be folded upon the lower rear portion of the back support member to become a convenient handle for carrying as in **FIG. 2**. To increase comfort of the occupant the seat **1** may be provided with armrests **16** of wood, metal, plastic, or the like and may be hingedly secured by similar means to the armrest prop **17** at **15**. Said armrest prop **17** may be constructed of similar materials and may be secured by similar means to stop base top portion **14** at **13**.

[0026] Having illustrated and described a preferred embodiment as well as variants of this invention, it will be obvious to those skilled in the art that further changes and modifications may become apparent. Such changes and modifications are not to affect this instant concept and are to be considered within the scope and essence of this invention.

I claim:

1. A folding chair comprising:
- a hollow, thermally insulated seat member,
- a back member pivotally mounted to said seat member, and
- a door pivotally mounted on said seat member.

2. A chair as set forth in claim **1** wherein a U-shaped handle is attached to said back member.

3. A chair as set forth in claim **1** and further comprising a liner covering the interior of the storage compartment.

4. A chair as set forth in claim **1** wherein the seat member will automatically adjust to accommodate occupants of different sizes.

* * * * *

Sample 5: Patent Application Publication - U.S. National Stage Application

Front Page only

US20030055555 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0055555 A1**

Hoffen et al. (43) **Pub. Date: Feb. 20, 2003**

(54) **PLASTIC EMULSION FOOD SPREAD**

(75) Inventors: **Ludwig Hoffen**, Ludwigshafen (DE); **Heidi-Elke Berg**, Heidelberg (DE); **Gunter Zengerhauss**, Gunzenhausen (DE)

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(73) Assignee: **Kohl-Mann GmbH**, Sandhofen (DE)

(21) Appl. No.: **09/000,000**

(22) PCT Filed: **Nov. 23, 2001**

(86) PCT No.: **PCT/DE01/00000**

(87) PCT Pub. No.: **WO02/00000**
PCT Pub. Date: **Jul. 14, 2002**

(30) **Foreign Application Priority Data**

Dec. 31, 2000 (GB) ……..…….……. 0000000
Jan. 12, 2001 (CA) ……..……..…….. 000000
Jan. 13, 2001 (ZA) ……... 00000

Publication Classification

(51) **Int. Cl.**[7] ……..…… **X00X 99/00**
(52) **U.S. Cl.** ……..……... **000/000**

(57) **ABSTRACT**

Margarine and low fat emulsion food spreads have been prepared, the fat phase of which consists essentially of randomized palm oil. The randomization is usually carried out on palm oil alone and enables a substantial amount of palm oil to be incorporated into the fat phase without the onset of excessive post-hardening effects. The randomization also minimizes the amount of expensive vegetable oils such as sunflower oil which have hitherto been found necessary adjuncts with palm oil in such products, particularly in recently developed soft spreads which can be spread directly at domestic refrigerator temperatures. The major part of the spreads of the invention preferably consists of a fat of melting point 25º-30º C., particularly derived from vegetable oils.

Sample 6: Patent Application Publication - Rule 47 Application

Front Page only

US20030066666 A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2003/0066666 A1**

Gentile et al. (43) **Pub. Date: Feb. 20, 2003**

(54) **PROCESS OF PREPARING AMINO ETHANOLS**

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(21) Appl. No.: **09/000,000**

(22) Filed: **Aug. 20, 2001**
(Under 37 CFR 1.47)

Related U.S. Application Data

(63) Continuation of application No. 09/000,000, filed on Dec. 14, 2000, now abandoned.

(60) Provisional application No. 60/000,000, filed on Jan. 27, 2000.

Publication Classification

(51) **Int. Cl.**[7] **X00X 99/00**

(52) **U.S. Cl.** **000/000**

(57) **ABSTRACT**

The compounds 2-N-[1,1-hydrogen or C_1-C_4-alkyl-2(3,4-methylenedioxyphenyl)ethyl]amino-1-(3-alkyloxycarbonyl or hydroxymethyl-4-benzyloxyphenyl) ethanol compounds, and the process of making these compounds. There is also disclosed a process of making the compounds 2-N-[1,1-hydrogen or C_1-C_4-alkyl-2(3,4-methylenedioxyphenyl)-ethyl]amino-1-(3-hydroxyl-4-hydroxy)ethanol.

Sample 7: Patent Application Publication Republication

Front Page + First Page of Specification [with CWU]

US20030077777 A2

(19) **United States**

(12) **Patent Application Publication**

Lessing et al.

(10) **Pub. No.: US 2003/0077777 A2**

(43) **Pub. Date: Feb. 20, 2003**

REPUBLICATION

(54) **BRONCHOSPASMOLYTIC 1-(P-AMINO-PHENYL)-2-AMINO-ETHANOLS-(1) AND SALTS**

(75) Inventors: **Gerhard Lessing**, Sandhofen (DE); **Klaus-Rheinhold Goethe**, Mannheim, (DE); **Helmut Schiller**, Sandhofen, (DE)

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(73) Assignee: **Schoenkopf GmbH**, Mannheim (DE)

(21) Appl. No.: **09/000,000**

(22) Filed: **Dec. 28, 2001**

Prior Publication Data

(65) US 2002/0000000 A1 Nov. 19, 2002

(30) **Foreign Application Priority Data**

Dec. 31, 2001 (DE) 000 00 000

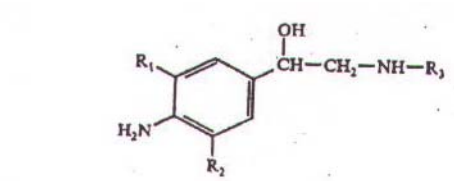
Publication Classification

(51) **Int. Cl.**[7] **X00X 99/00**

(52) **U.S. Cl.** **000/000**

(57) **ABSTRACT**

Racemic and optically active compounds of the formula:



wherein

R_1 is hydrogen, fluorine, chlorine, bromine, iodine or cyano,

R_2 is fluorine, trifluoromethyl, nitro or cyano, and

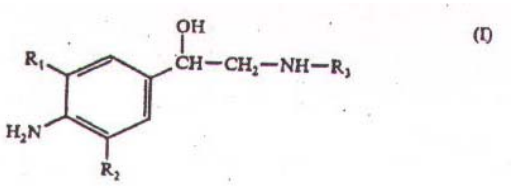
R_3 is alkyl of 3 to 5 carbon atoms, hyroxy(alkyl of 3 to 5 carbon atoms), cycloalkyl of 3 to 5 carbon atoms, 1-(3,4-methylenedioxy-phenyl)-2-propyl or 1-(p-hydroxy- phenyl)-2-propyl,

and non-toxic, pharmacologically acceptable acid addition salts thereof; the compounds as well as their salts are useful as analgesics, uterospasmolytics, bronchospasmolytics and antispastics for the skeletal musculature, and especially as β_2-receptor mimetics and β_1-receptor blockers.

BRONCHOSPASMOLYTIC 1-(P-AMINO-PHENYL)-2-AMINO-ETHANOLS-(1) AND SALTS

[0001] This invention relates to novel 1-(p-amino-phenyl)-2-amino-ethanols-(1) and acid addition salts thereof, as well as to various methods of preparing these compounds.

[0002] More particularly, the present invention relates to a novel class of racemic and optically active 1-(p-amino-phenyl)-2-amino ethanols of the formula



(I)

[0003] wherein

[0004] R_1 is hydrogen, fluorine, chlorine, bromine, iodine or cyano,

[0005] R_2 is fluorine, trifluoromethyl, nitro or cyano, and

[0006] R_3 is alkyl of 3 to 5 carbon atoms, hydroxy(alkyl of 3 to 5 carbon atoms), cycloalkyl of 3 to 5 carbon atoms, 1-(3,4-methylenedioxy-phenyl)-2-propyl or 1-(p-hydroxy-phenyl)-2-propyl,

[0007] and non-toxic, pharmacologically acceptable acid addition salts thereof.

[0008] A sub-genus thereunder is constituted by compounds of the formula I, where

[0009] R_1 and R_3 have the meanings defined above, and

[0010] R_2 is trifluoromethyl, nitro, or cyano,

[0011] and non-toxic, pharmacologically acceptable acid addition salts thereof.

[0012] A further sub-genus thereunder is constituted by compounds of the formula I, where

[0013] R_3 has the meanings defined above,

[0014] R_1 is fluorine, chlorine, bromine, iodine or cyano, and

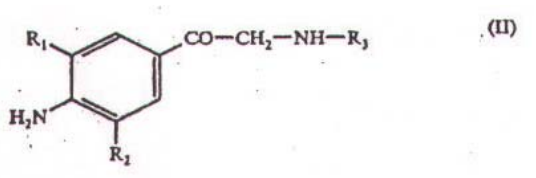
[0015] R_2 is trifluoromethyl, nitro or cyano,

[0016] and non-toxic, pharmacologically acceptable acid addition salts thereof.

[0017] The compounds embraced by formula I may be prepared by the following methods:

Method A

[0018] By reduction of an acetophenone of the formula



(II)

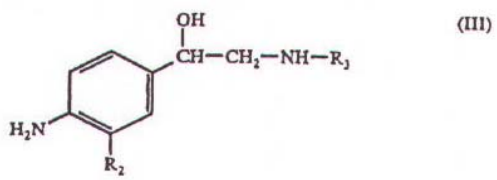
[0019] wherein R_2, R_2 and R_3 have the same meanings as in formula I.

[0020] The reduction is preferably carried out in a solvent, such as methanol, methanol/water, ethanol, isopropanol, ether, tetrahydrofan or dioxane, either with a complex metal hydride, such as lithium aluminum hydride or sodium borohydride, or with aluminum isopropylate in the presence of a primary or secondary alcohol, or with catalytically activated hydrogen, at temperatures between −20° C. and the boiling point of the solvent which is used.

[0021] The reduction with a complex metal hydride is, however, preferably carried out with sodium borohydride at room temperature. If a reactive complex metal hydride, such as lithium aluminum hydride, is used and if the reduction is carried out at elevated temperatures, the cyano group mentioned in the definition of substituent R_2 may also be reduced at the same time.

Method B

[0022] For the preparation of a compound of the formula I, wherein R_1 is chlorine, bromine or iodine, by halogenation of a compound of the formula



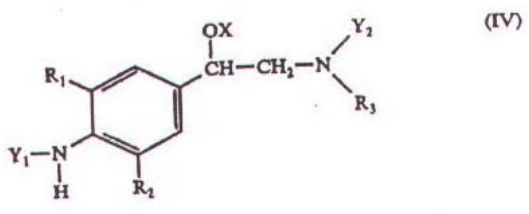
(III)

[0023] wherein R_2 and R_3 have the meanings defined above.

[0024] The reaction is carried out with a halogenating agent, such as chlorine, bromine, iodine, tribromophenalbromine or iodo benzene dichloride, preferably in a solvent, such as 50 to 100% acetic acid or in tetrahydrofan in the presence of a tertiary organic base, and optionally in the presence of a heavy metal salt, such as mercury(II)oxide and at a temperature between 0° and 50° C. per mol of a compound of the formula III, which may be used as base or also as salt, such as its mono-, di- or trihydrochloride, 1 mol of the halogenating agent or a small excess thereover is employed. If a hydrogen halide salt is obtained during the reaction, the salt may be directly isolated or , if desired, it may be further purified by way of the base.

Method C

[0025] By removal of one or more protective groups from a compound of the formula



(IV)

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Sample 8: Patent Application Publication
Corrected Publication

Front Page only

US20030088888 A9

(19) **United States**

(12) **Patent Application Publication**

Darkbloom et. Al

(10) **Pub. No.: US 2003/0088888 A9**

(48) **Pub. Date: Feb. 20, 2003**

CORRECTED PUBLICATION

(54) **ANIMAL TRAP**

(76) Inventor: **Vivian Q. Darkbloom**, Ramsdale, NH (US); **Ada V. Veen**, Ithaca, NY (US); **Charlotte Anne Haze**, Ramsdale, NH (US); **John Shade**, Ithaca, NY (US); **Timofey V. Pnin**, Ithaca, NY (US); **Charles V. Kinbote**, Ithaca, NY (US)

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(21) Appl. No.: **09/000,000**

(22) Filed: **Mar. 15, 2001**

Prior Publication Data

(15) Correction of US 2002/0000000 A2 Dec. 12, 2002
See Claim 1.

(65) US 2002/0000000 A2 Dec. 12, 2002
US 2002/0000000 A1 Oct. 24, 2002

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(57) **ABSTRACT**

An animal trap which precipitates an animal into a disposal chamber through a disposal opening, characterized by having a pyramidal bait chamber, with an entrance and non-grip internal surfaces around the disposal opening and a pivoted shutter that normally closes the disposal opening, but is actuated by the weight of the animal to not only unclose the disposal opening, but also close the entrance.